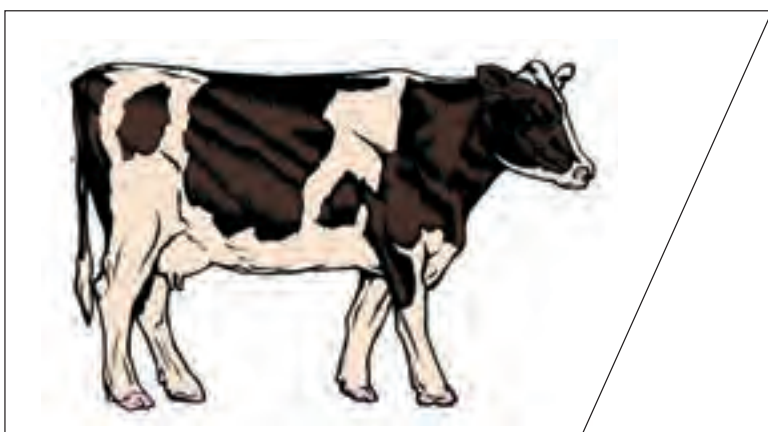
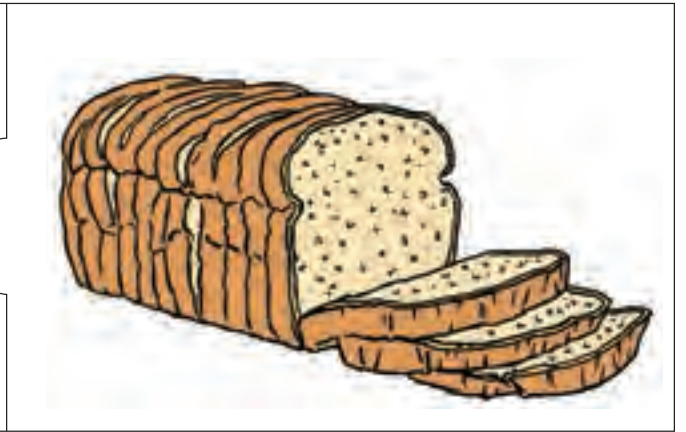




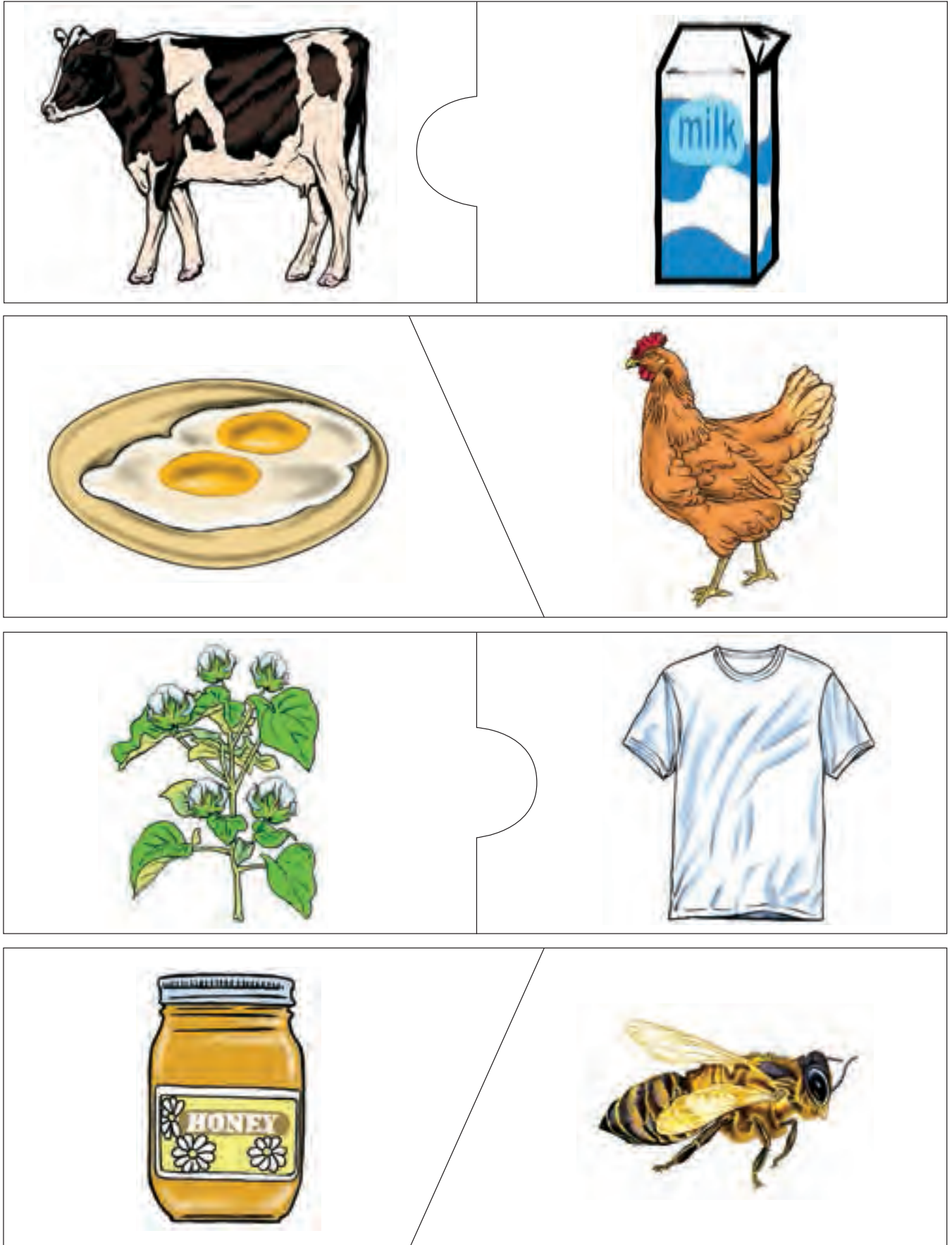
# Puzzles

Use the following puzzles in your learning centers and with related *Nature Revealed* learning experiences. The icon in the upper right-hand corner shows you which learning experiences the puzzles support. To extend the life of your puzzles, cut them apart, then laminate them.

# Plant and Animal Product Puzzles 15

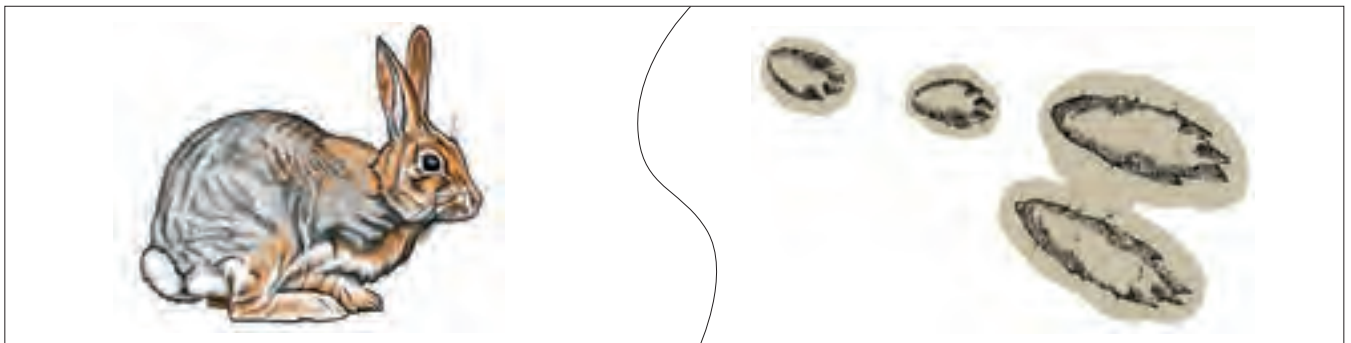


# Plant and Animal Product Puzzles 15

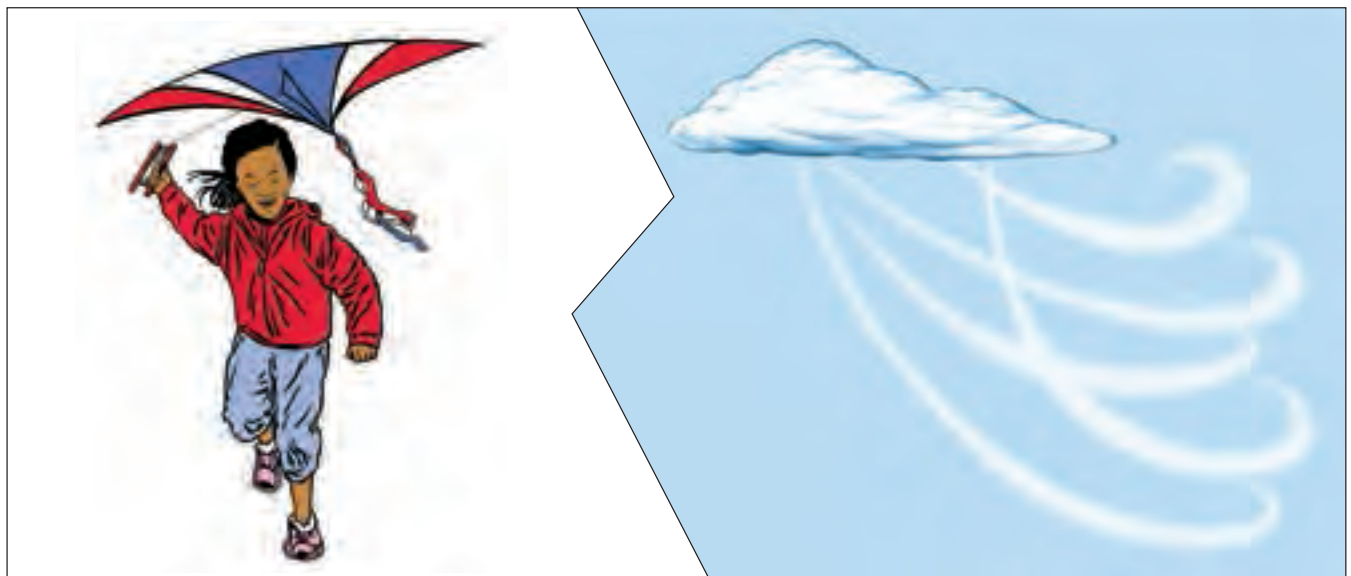




# Track Puzzles 8



# Energy Puzzles 16



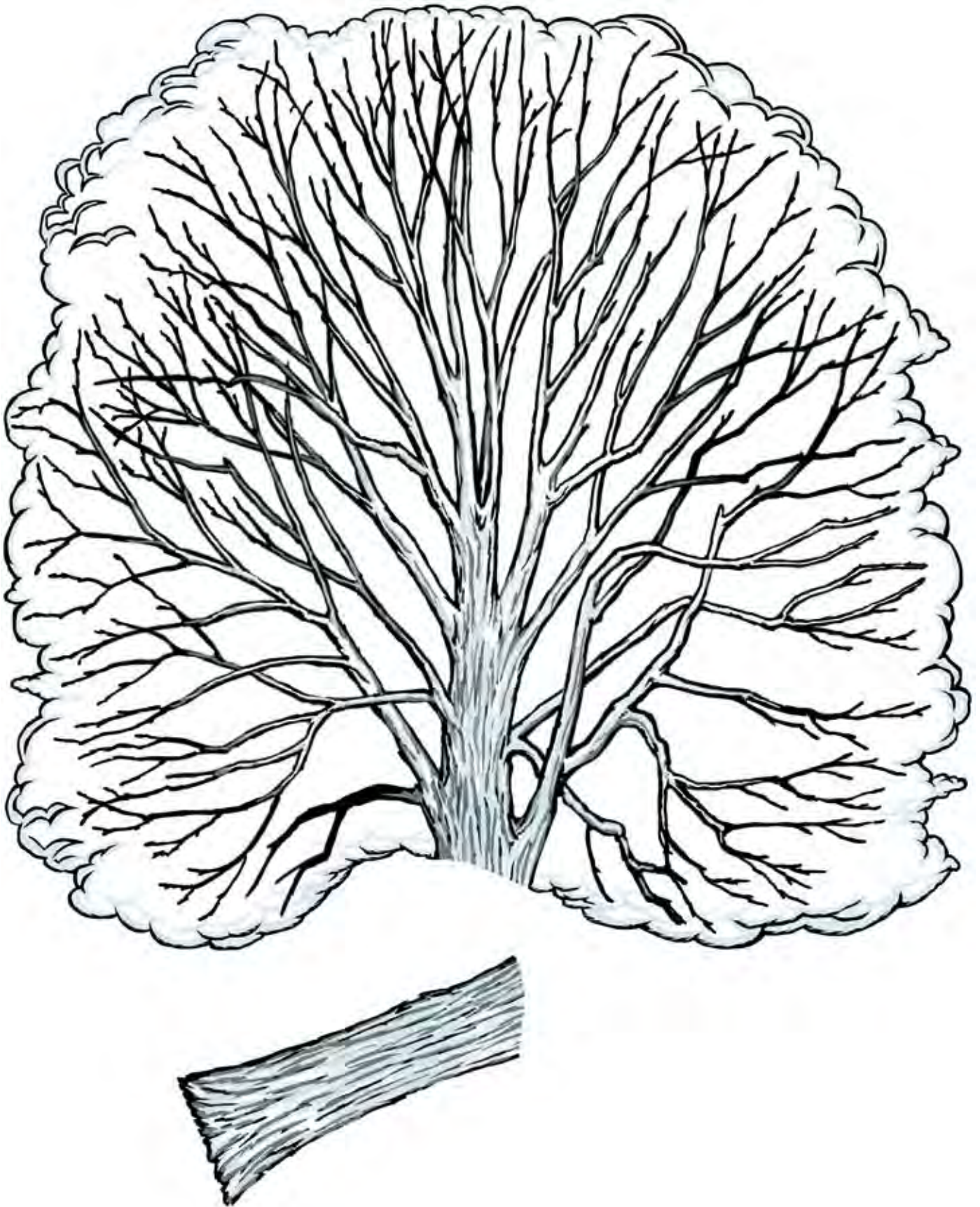


# Storyboard Characters

These colorful characters illustrate concepts in selected *Nature Revealed* stories. The icon in the upper right-hand corner shows you which learning experiences the characters support. Make the characters last longer by cutting them apart, then laminating, and applying small magnetic strips or small dots of Velcro, depending on the kind of storyboard you have.

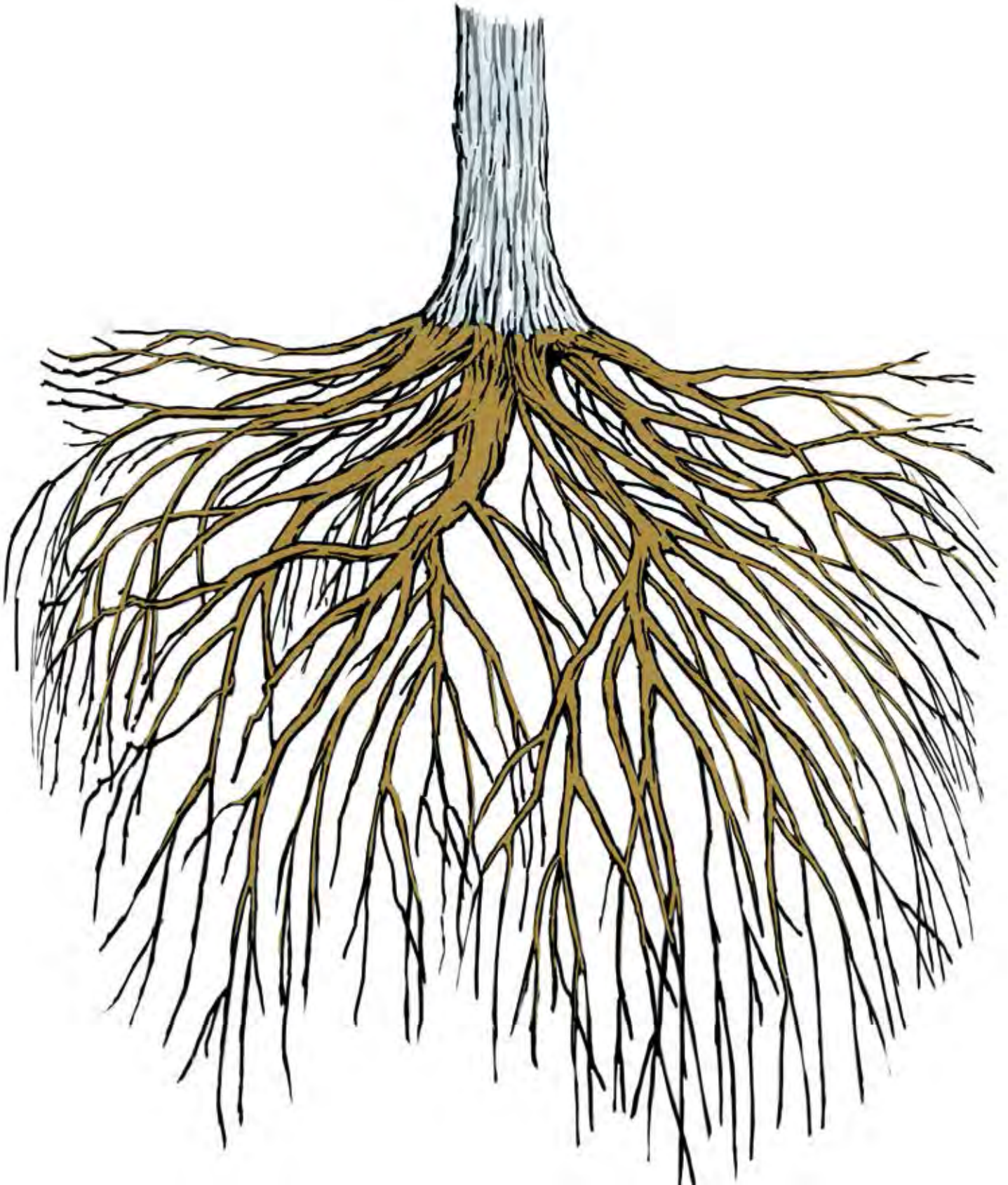


# Tree Puzzle 5





# Tree Puzzle 5





# Tree Puzzle 5



# Tree Puzzle 5

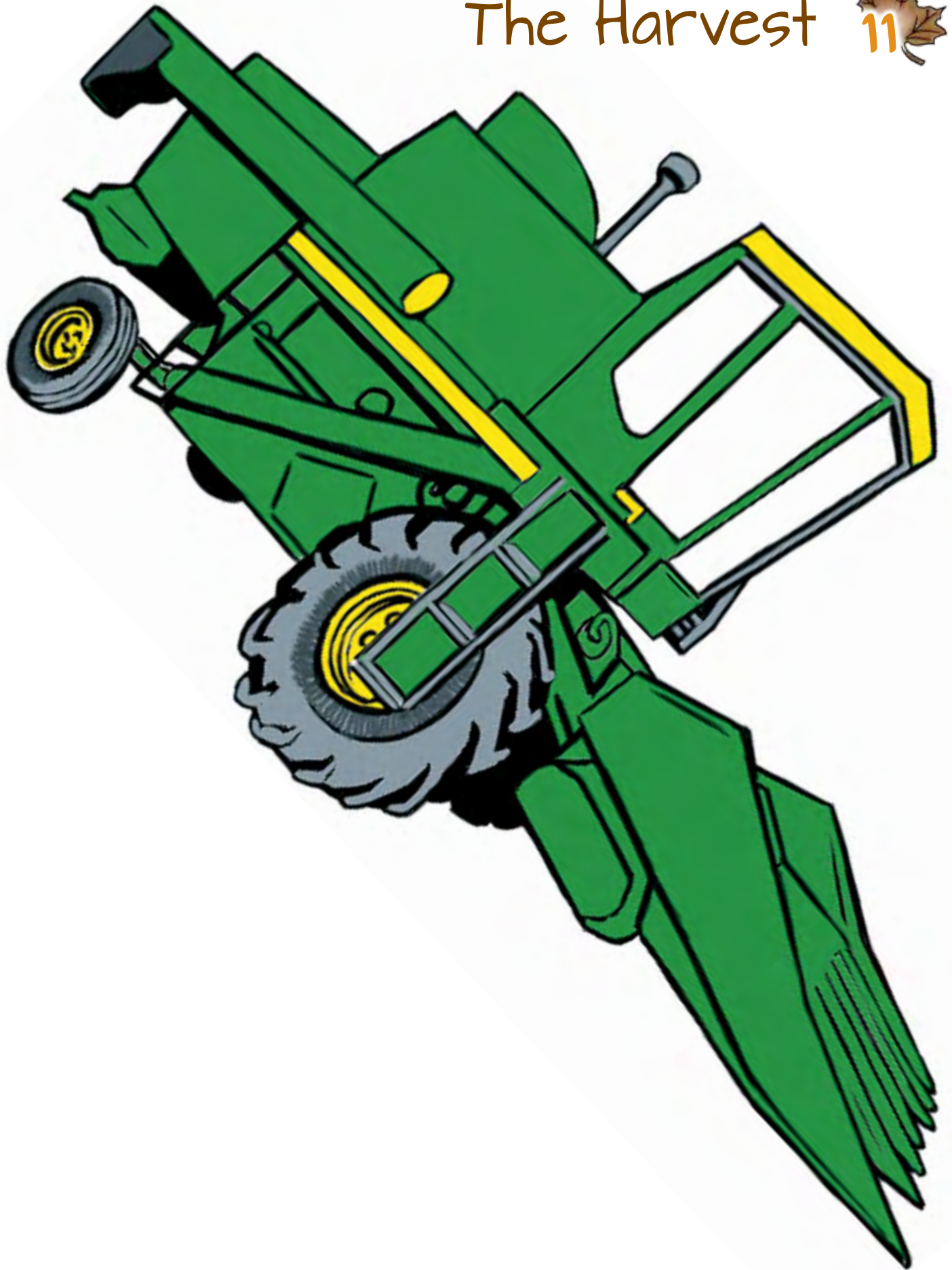




# Tree Puzzle 5

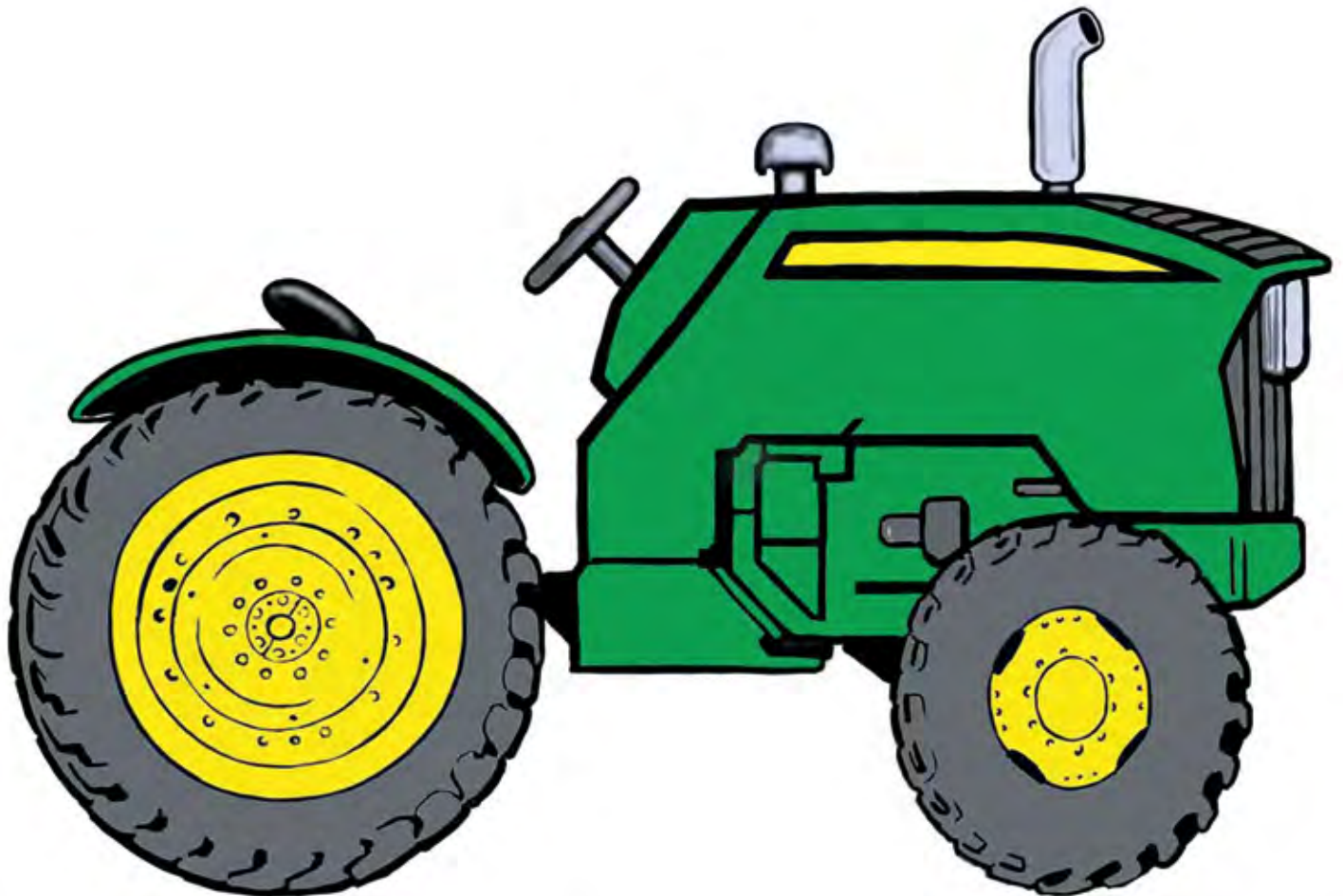
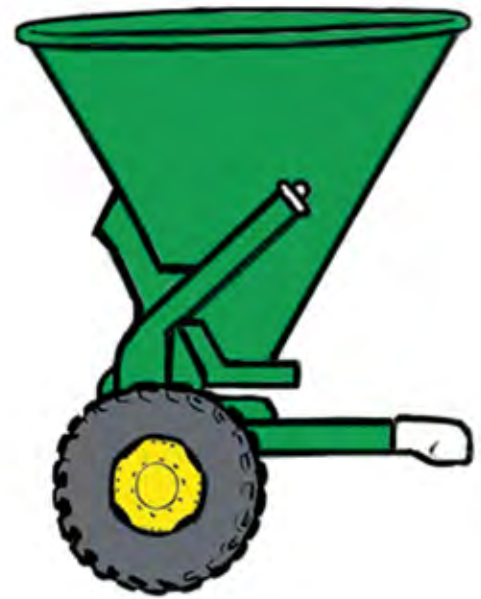
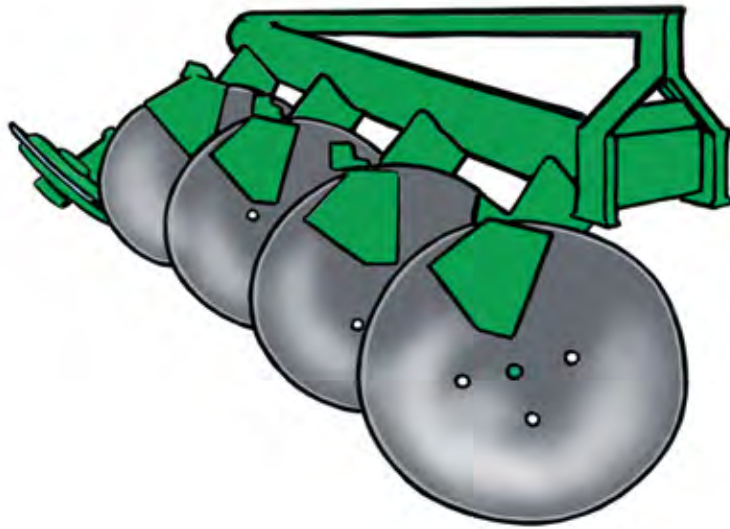


# The Harvest 11

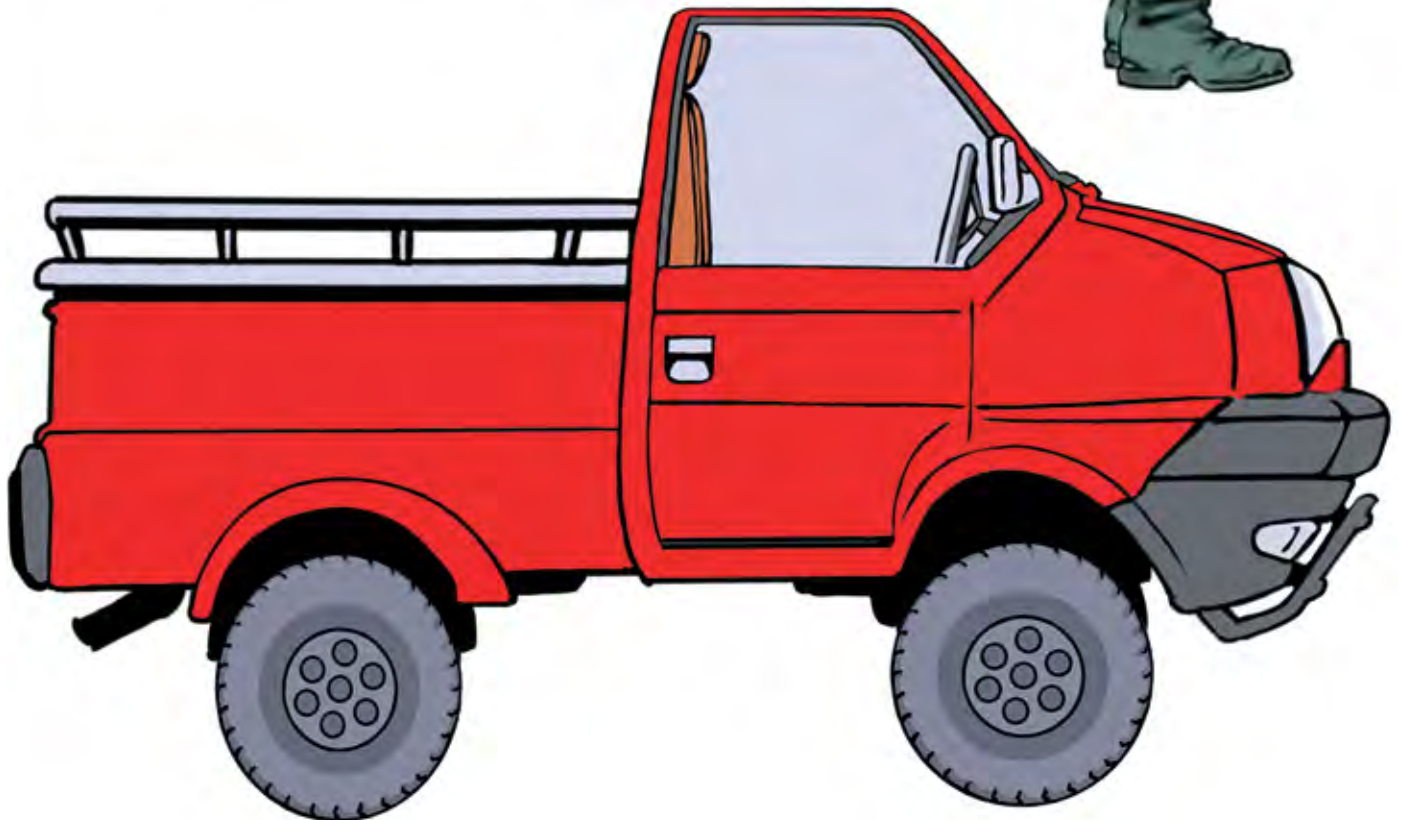
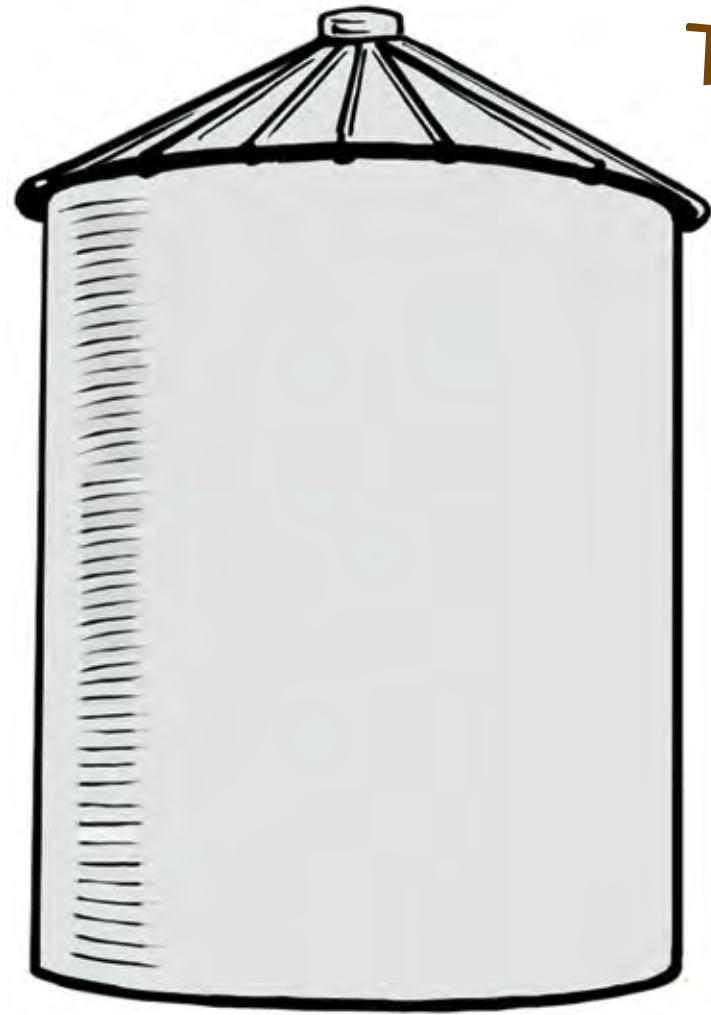




# The Harvest 11



# The Harvest 11





# The Harvest 11



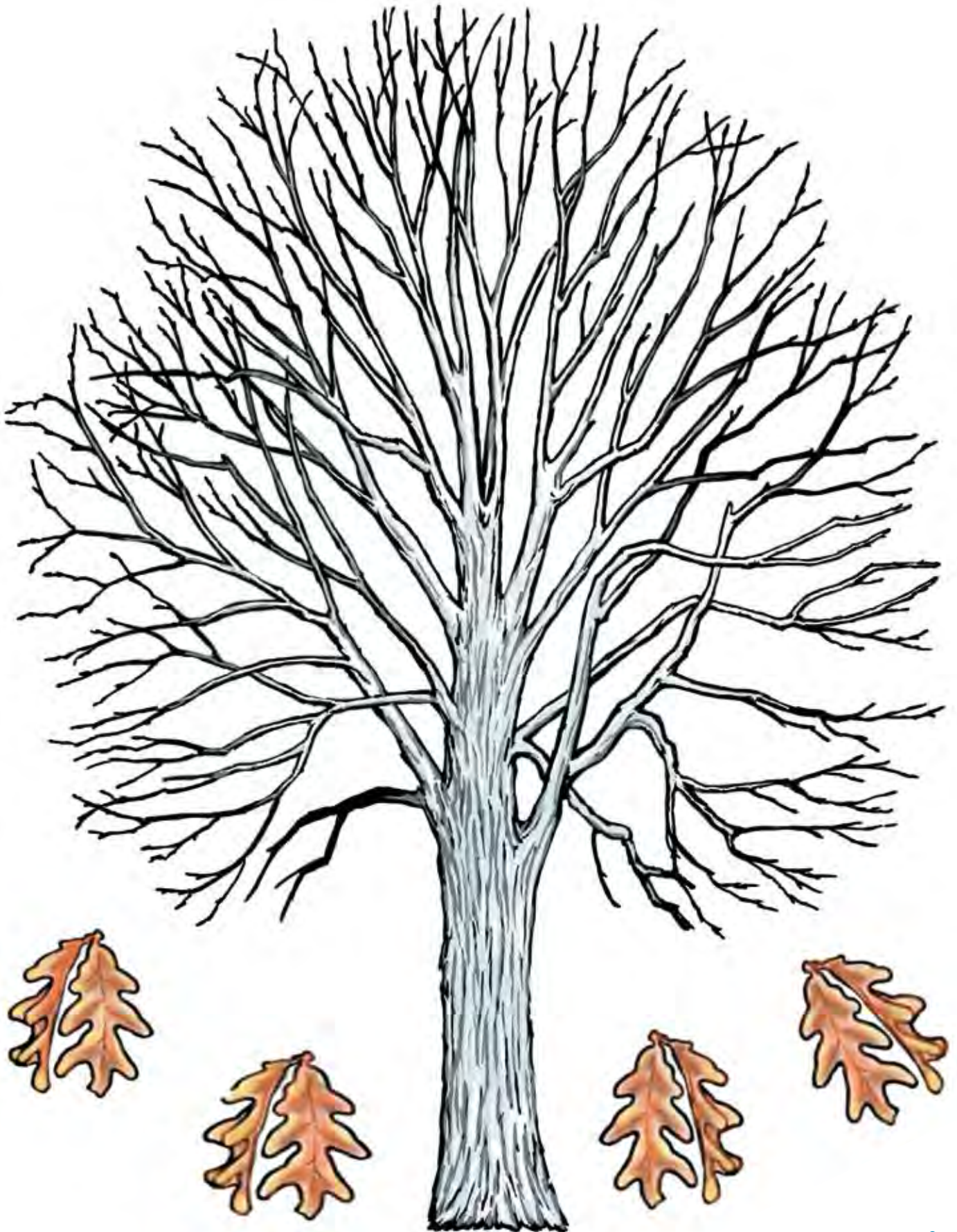


# Everything Needs Something to Live 16



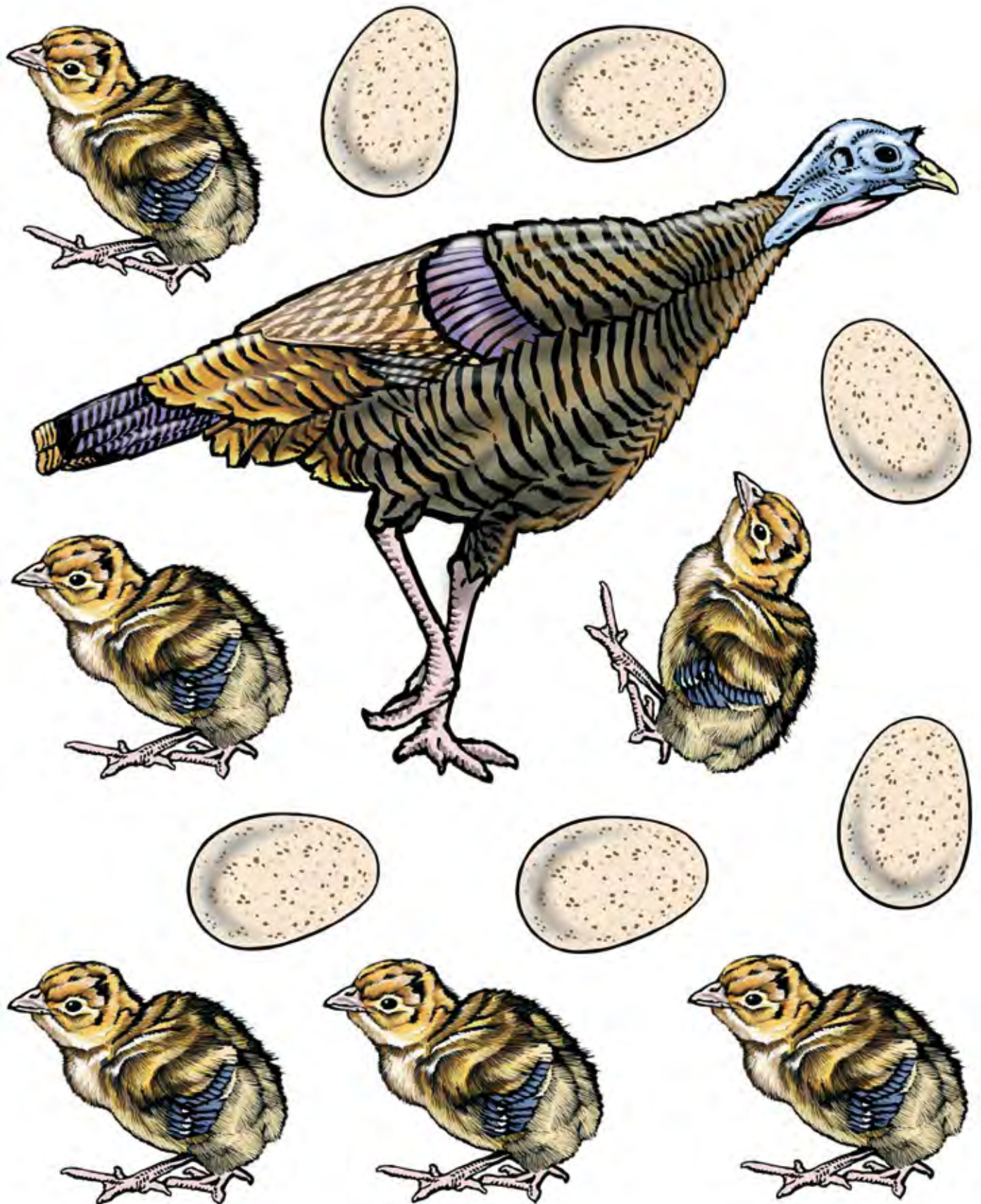


# Everything Needs Something to Live 16



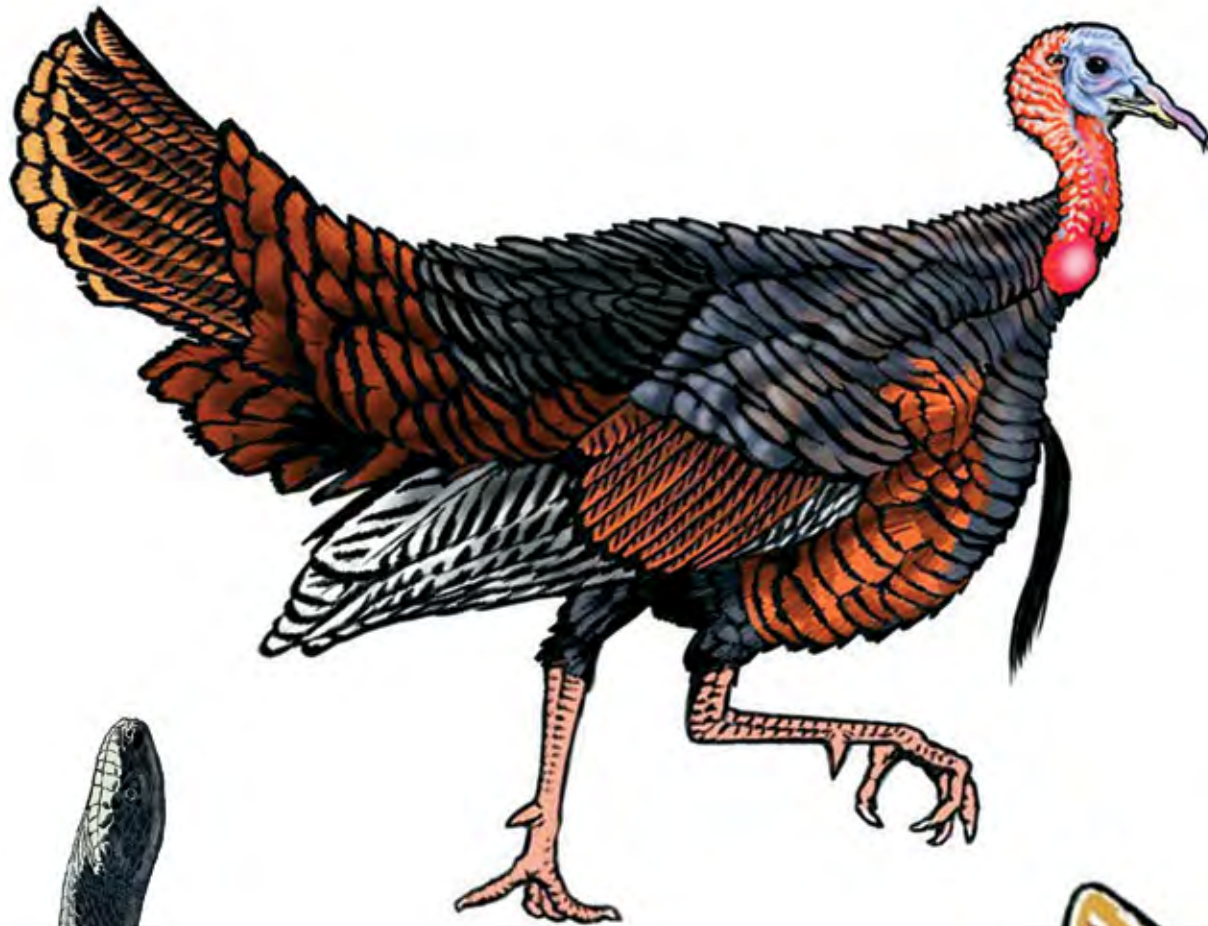


# See How the Turkey Grows 21





# See How the Turkey Grows 21





# See How the Turkey Grows

21 





# Bird Puzzles



# Willie the Woodchuck





B, T and u 15





B, T and u  15





# Fred's Forest 21





# Fred's Forest 21

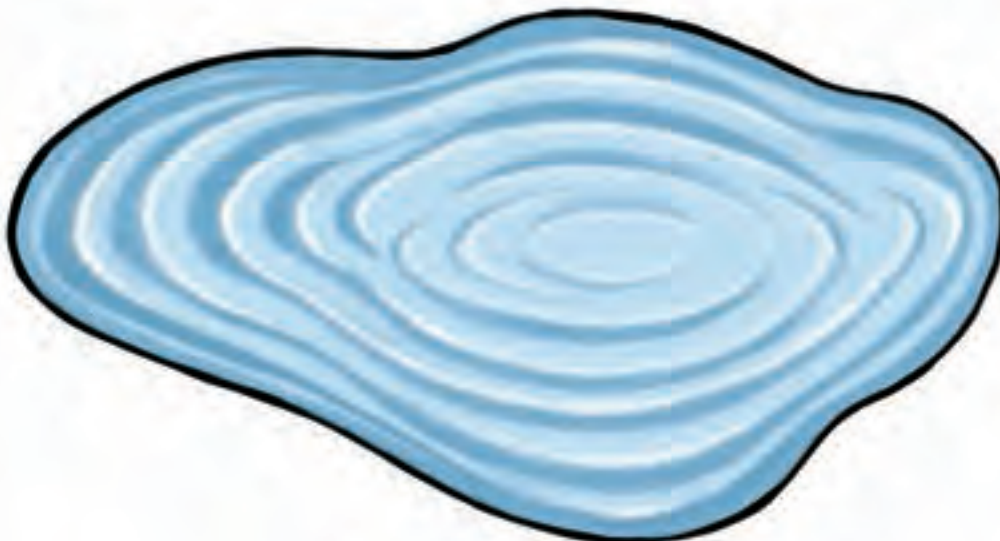
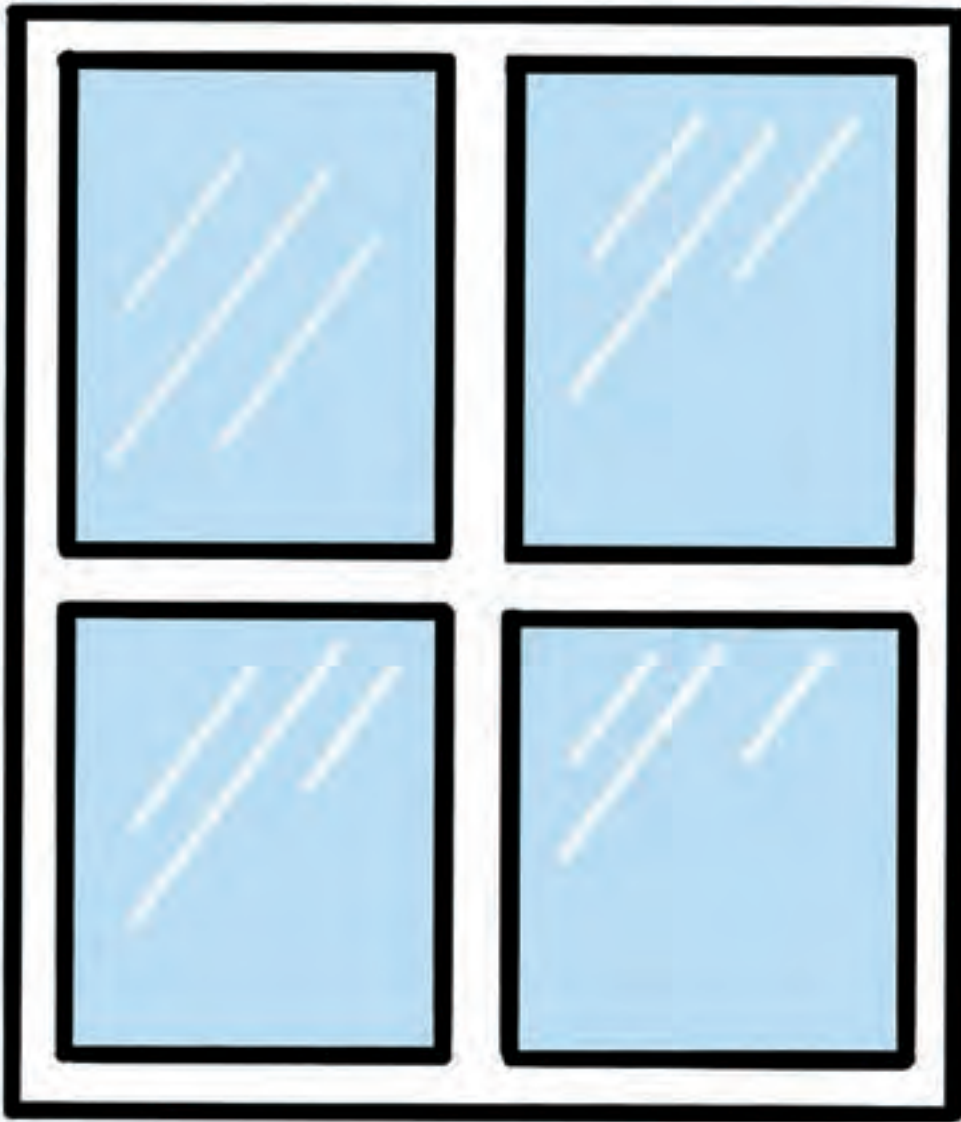




# Drip and Drop



# Drip and Drop





# Where Do Animals Go When it Rains? 3





# Where Do Animals Go When it Rains? 3





# Where Do Animals Go When it Rains? 3



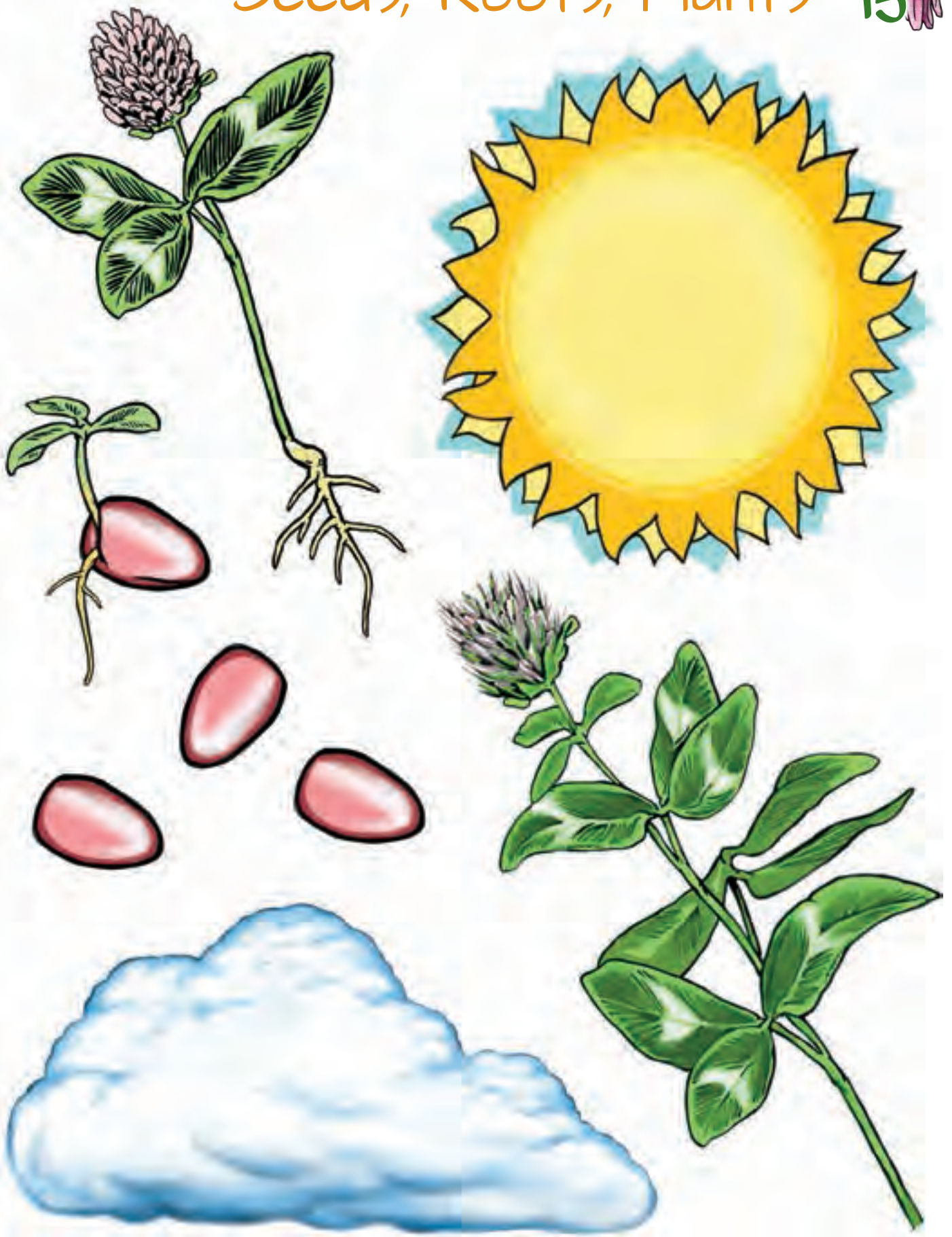


# Where Do Animals Go When it Rains? 3





# Seeds, Roots, Plants 15



# Seeds, Roots, Plants 15



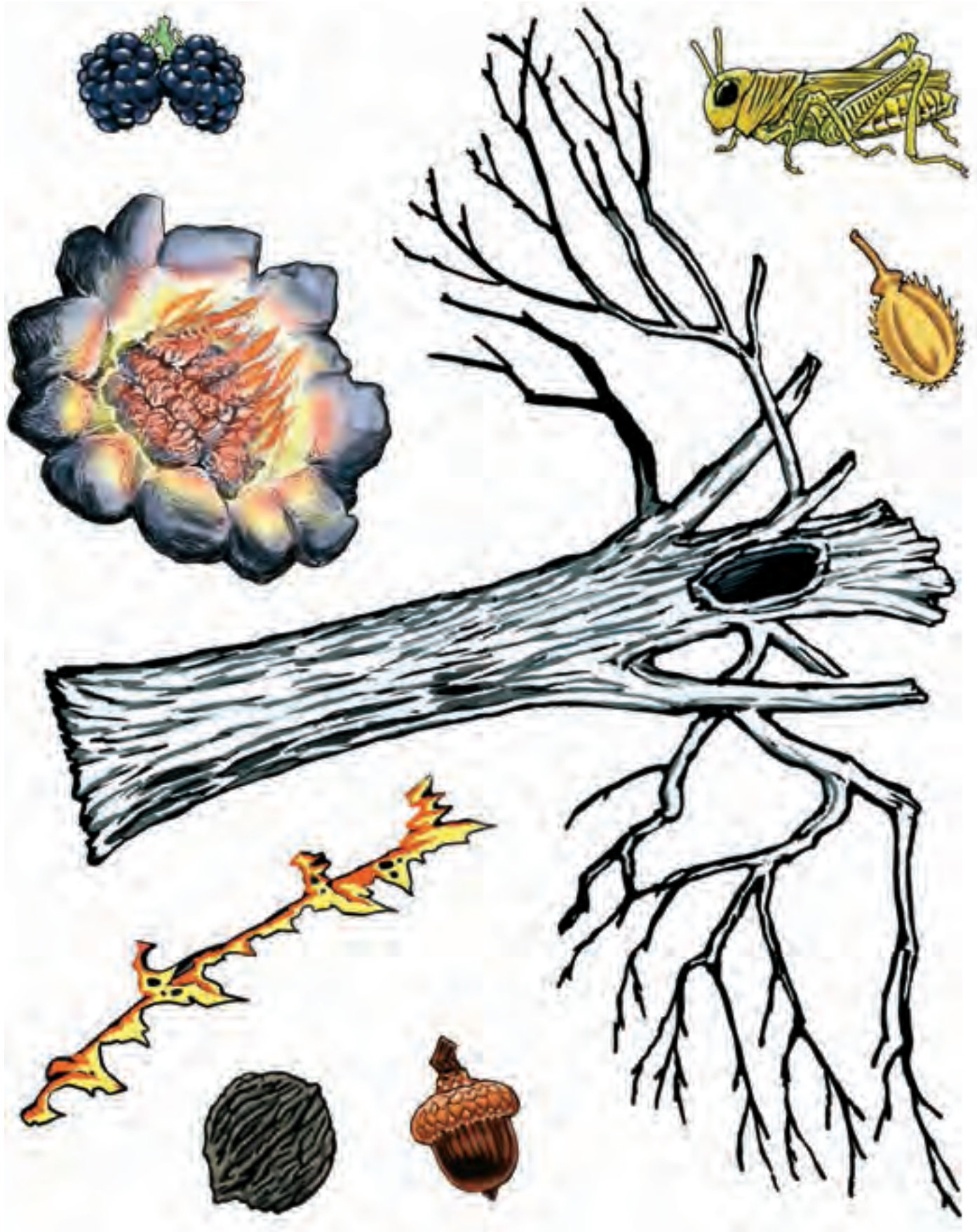


# A Plant Puzzle 15





# Molly and the Forest Fire 17

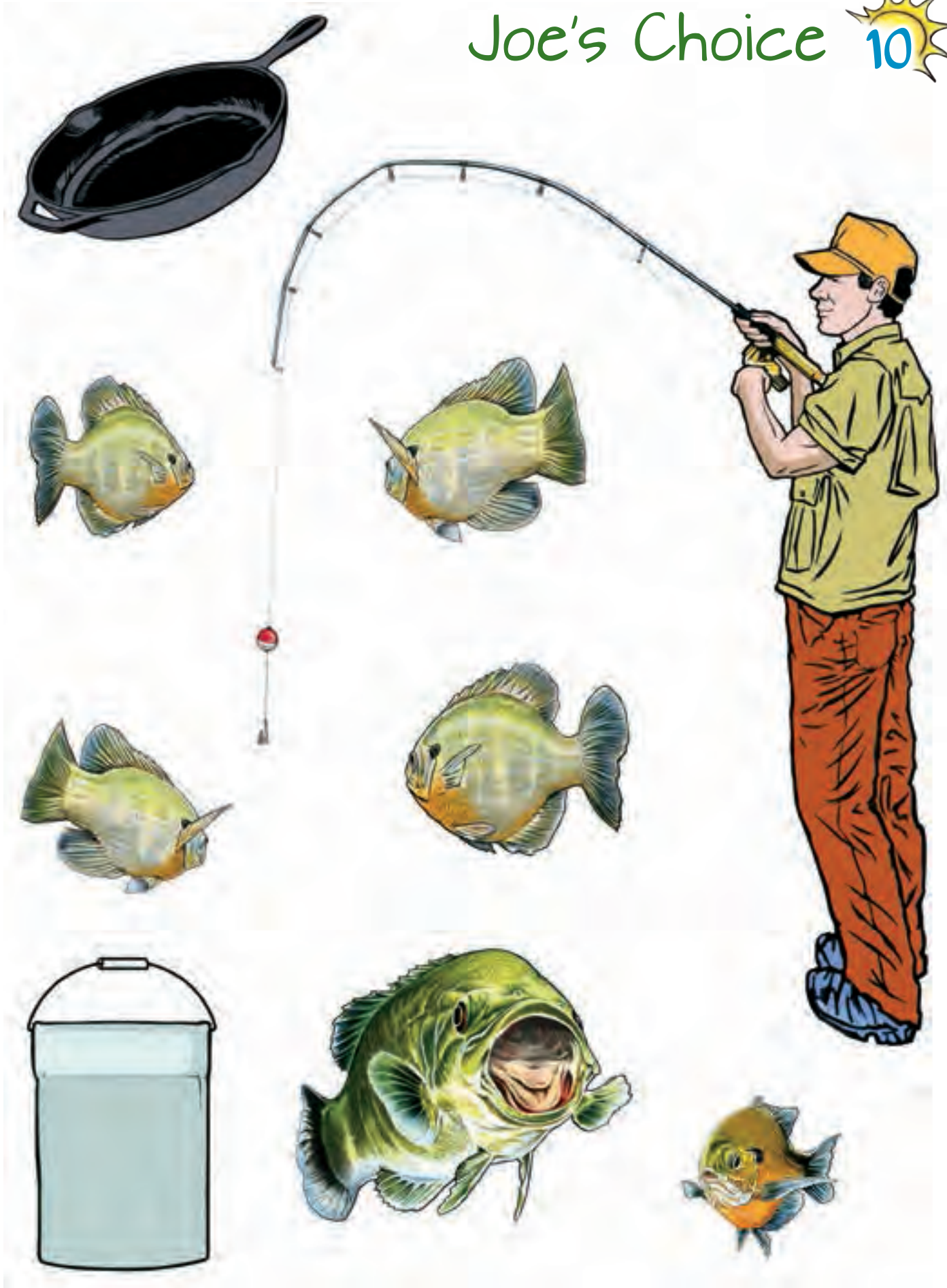




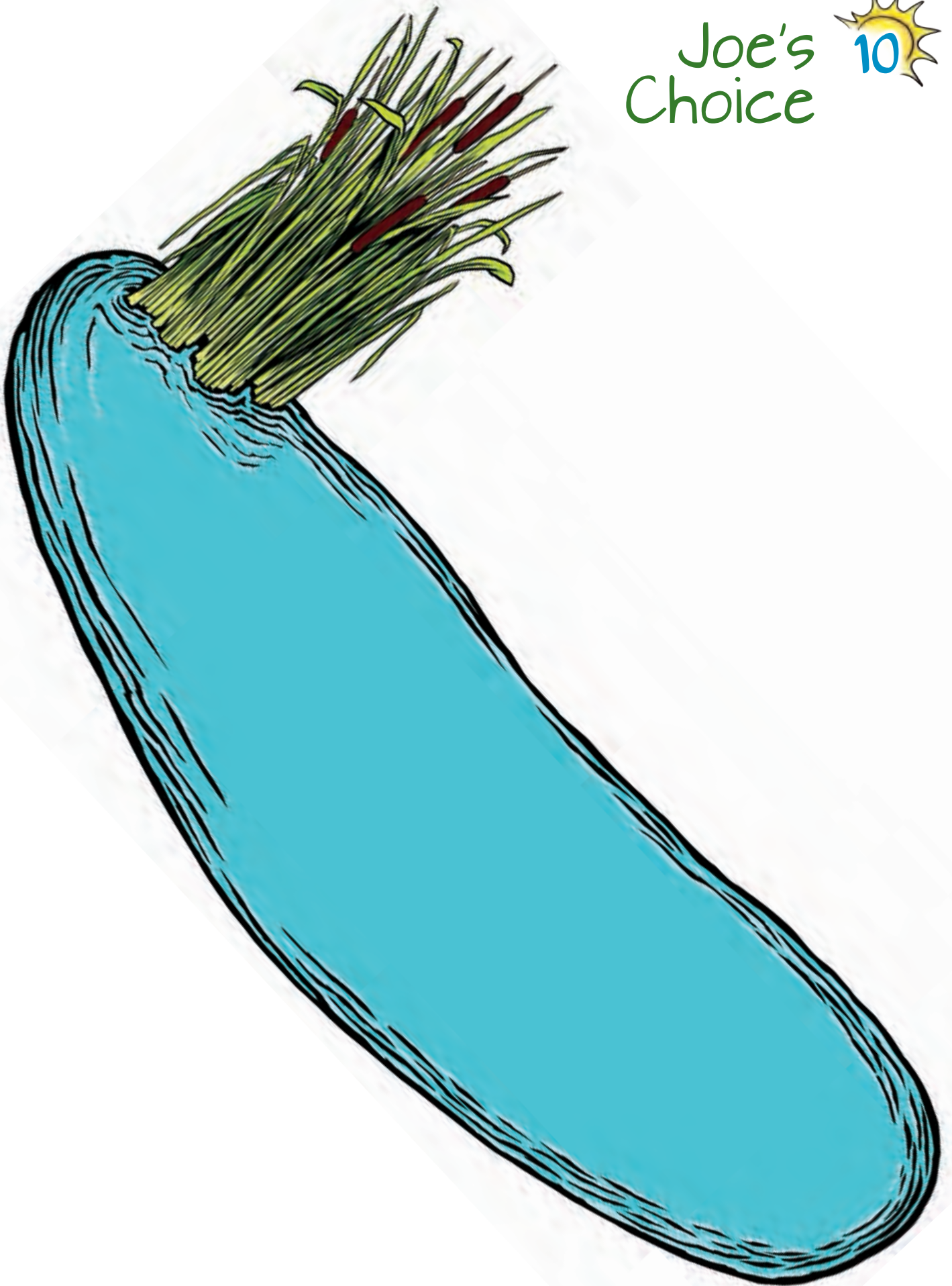
# Molly and the Forest Fire 17



# Joe's Choice 10







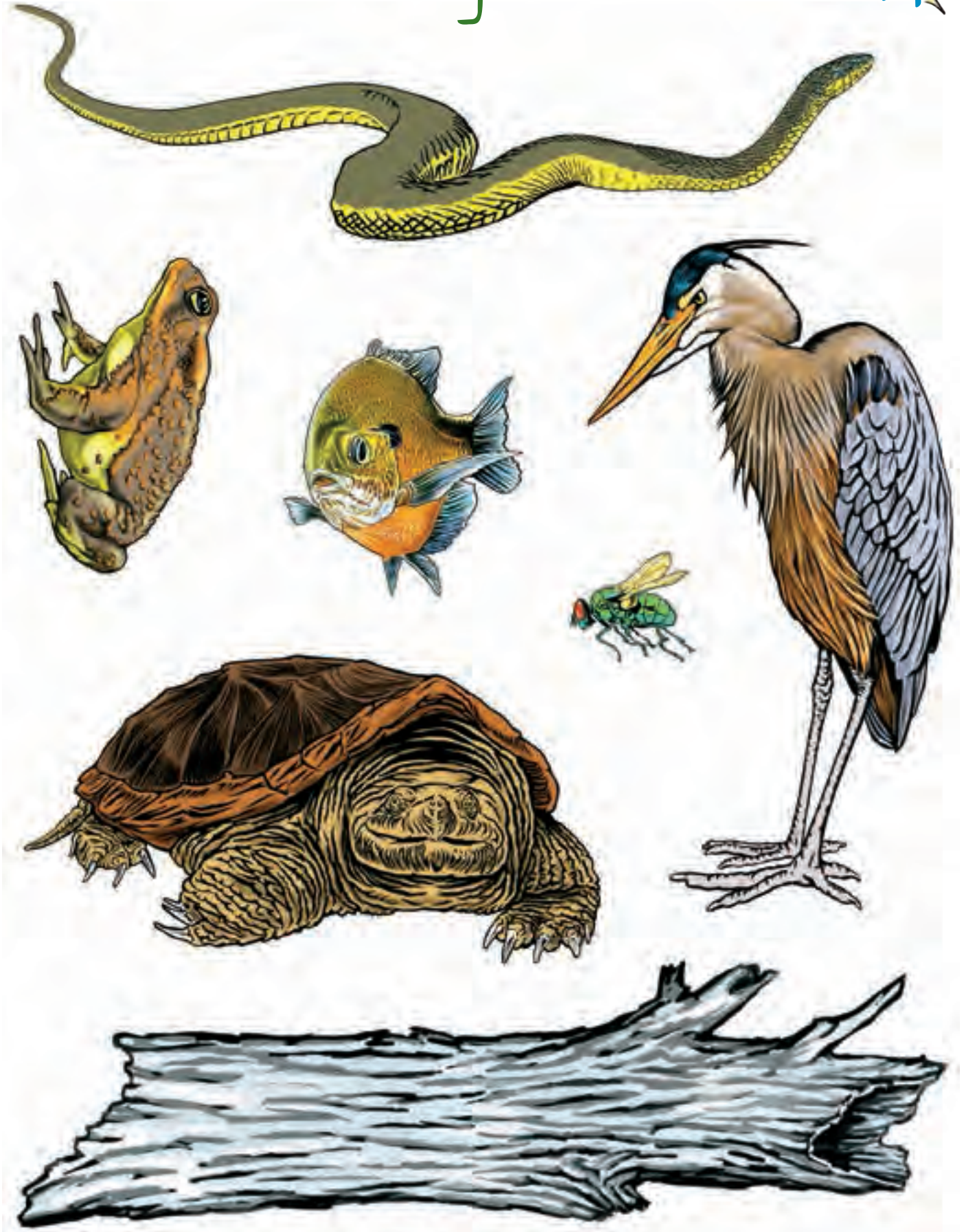


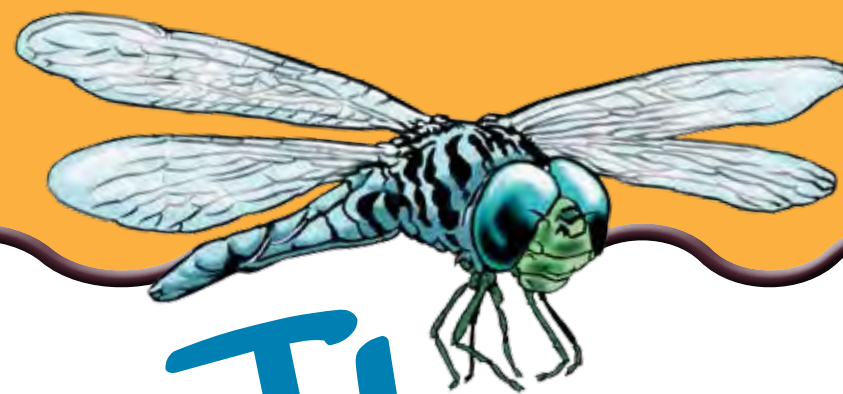
# Frogs and Toads 14





# Frogs and Toads 14



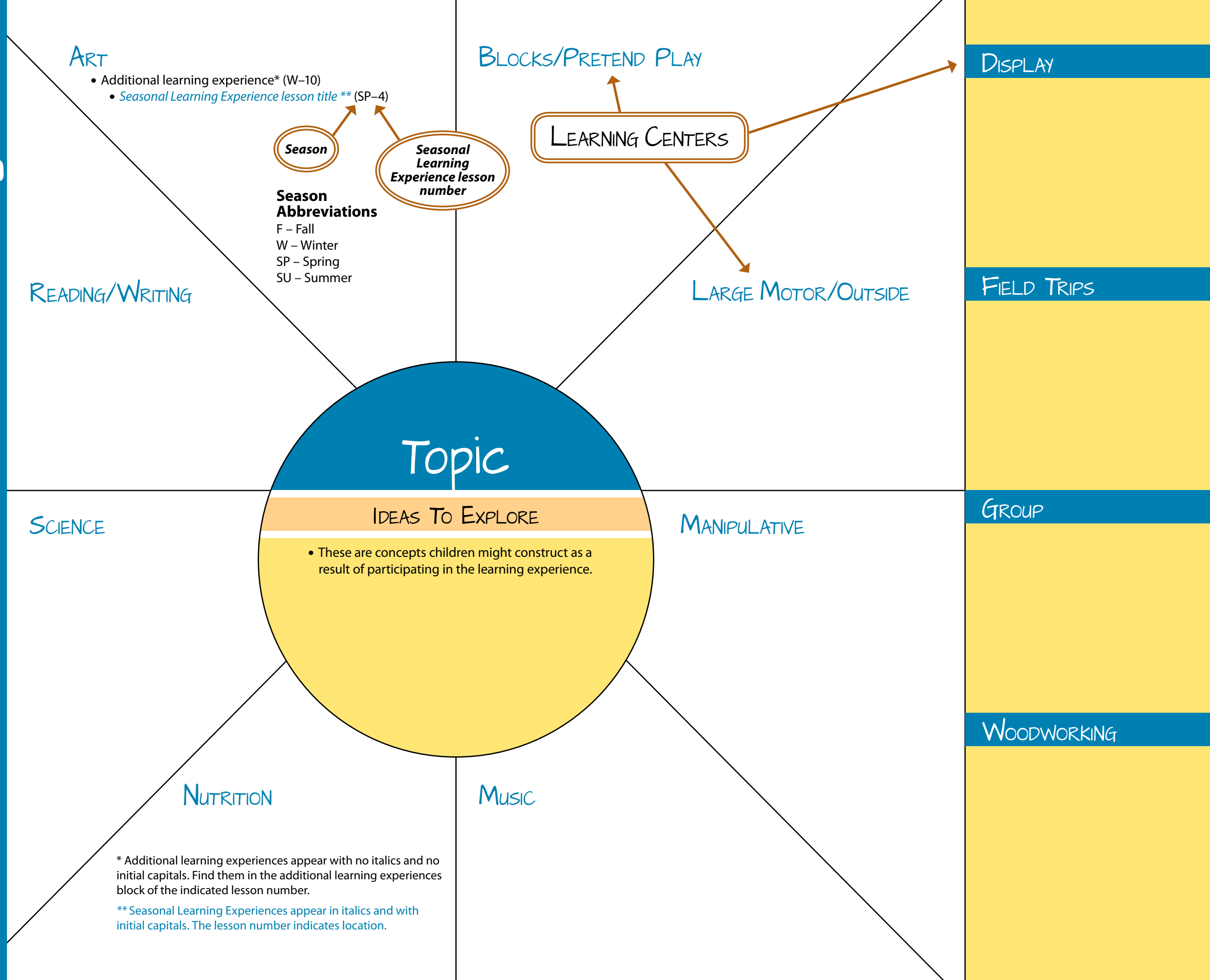


# Thematic Lesson Plans

The diagrams in this section show you how to use *Nature Revealed* learning centers and learning experiences to explore nature topics and meet Missouri's early learning goals.



# Thematic Lesson Plan Legend



# Air and Water

## ART

- Ice painting (W-10)
- Chalk on dark paper art (W-10)
  - Snowflakes (W-10)
  - Ice sculptures (W-13)
  - Rainbow pictures (SP-1)
  - Cloud pictures (SP-1)
  - Storm painting (SP-1)
    - *What Goes in the Wind* (SP-4)
    - Wind chimes (SP-4)
    - Blow painting (SP-4)
    - Aquatic-life pictures (SU-9)

## READING/WRITING

- *B, T, and U* (W-15)
- *Drip and Drop* (SP-1)
- *Seeds, Roots, Plants* (SP-15)
- *Joe's Choice* (SU-10)

## BLOCKS/PRETEND PLAY

- Ice fishing (W-11)
- *Hanging Out* (SP-2)
- Oil and water in sensory table (SU-8)

## LARGE MOTOR/OUTSIDE

- Experiment with traveling seeds (F-10)
- Blow on seeds that travel in the wind (F-10)
- Look for seeds that travel in the wind (F-10)
  - *Skaters Away* (W-11)
  - Act like melting ice (W-13)
  - Freeze tag (W-13)
  - Observe clouds (SP-1)
  - Rainbow dance (SP-1)
  - Measure the rain (SP-1)
  - Pretend to be raindrops (SP-1)
  - Water painting (SP-2)
  - Tie crepe paper on trike handlebars (SP-4)
  - Blow bubbles in the wind (SP-4)
    - Kites (SP-4)
    - Feel air on windy day (SU-7)
    - Windy races (SU-7)
    - Move like animals in water (SU-9)

## DISPLAY

- Pictures of clouds (SP-1)
- Pictures of how wind helps and harms people and/or animals (SP-4)

## FIELD TRIPS

- Walk in the rain (SP-1)
- Look for signs of erosion (SP-10)
- Check leaves in ditch for *What's in the Air?* (SU-8)
- *Aquatic Life* (SU-9)

## Air and Water

### IDEAS TO EXPLORE

- Air and water are important to all living things.
- Ice is a solid form of water.
- Water cycles over and over again.
- Water cycles to earth in several different states (solid—snow, liquid—rain, gas—fog)
- Air is difficult to see but can be felt and heard.
- People can affect both water and air.

## SCIENCE

- *Do Trees Get Drinks?* (F-4)
- Filter snow (W-10)
- Prism rainbows (SP-1)
- Make a cloud (SP-1)
- Cloud diary (SP-1)
- Observe a puddle (SP-2)
- *What Is Air?* (SU-7)
- *What's in the Air?* (SU-8)
- Water samples (SU-9)
- Underwater "feely" box (SU-9)

## MANIPULATIVE

- *Where Do Animals Go When it Rains?* (SP-3)

## GROUP

- *Habitat* (F-17)
- *Melt the Ice Cube* (W-13)
- Compare wind creations (SP-4)
- *What Is Erosion?* (SP-10)

## WOODWORKING

## NUTRITION

- Cloud snacks (SP-1)
- Animal crackers and water (SP-3)

## MUSIC

- *I'm a Little Milkweed Cradle* (F-10)
- *Three Little Snowflakes* (W-10)
- Three rain drops song (SP-1)
- Dance in wind with scarves (SP-4)



# Amphibians and Reptiles

## ART

- *Cave Life* (F-18)
- *What Hatches From an Egg?* (SP-22)
- Aquatic life pictures (SU-9)
- *Fishing Permits* (SU-11)
- Frog and toad finger paint (SU-14)
- Frog and toad habitat (SU-14)
- Camouflage painting (SU-16)

## READING/WRITING

- *Frogs and Toads* (SU-14)

## BLOCKS/PRETEND PLAY

- Build amphibian and reptile habitats (F-17)
- Conservation agent dress-up clothes (SU-11)
- Frogging (SU-12)

## LARGE MOTOR/ OUTSIDE

- Move like amphibians and reptiles and find habitat (F-17)
- Act out metamorphosis of frog or toad (SU-14)
- Leapfrog (SU-14)
- *You Can't Find Me!* (SU-16)

## DISPLAY

## FIELD TRIPS

- Look for amphibian and reptile habitat (F-17)
- *Aquatic Life* (SU-9)
- Search out amphibian and reptile animal cards on hike (SU-16)

## GROUP

- *Habitat* (F-17)

## WOODWORKING

## Amphibians and Reptiles

### IDEAS TO EXPLORE

- Amphibians go through metamorphosis, reptiles do not.
- Amphibians and reptiles are both cold blooded.
- Amphibians lay eggs, usually in water.
- Reptiles hatch from eggs, usually buried on land.
- Reptiles and amphibians can be identified by their eggs and/or color pattern.
- Amphibians and reptiles are both predator and prey.
- Amphibians and reptiles live on land and in water.
- Reptiles have scales, amphibians do not.
- Reptiles are not slimy or scary.
- Frogs and toads are different.

## SCIENCE

- Underwater "feely" box (SU-9)
- Observe a frog or toad (SU-14)

## MANIPULATIVE

- *Where Do Animals Go When it Rains?* (SP-3)
- Frog and toad sort (SU-14)
- Sort animal cards by skin covering (SU-16)

## NUTRITION

- Edible frogs and toads (SU-14)
- Peanut butter play-dough prey (SU-15)

## MUSIC

- *Habitune* (F-17)
- Frogs and toads song (SU-14)
- *Ribbit Ribbit* (SU-14)
- *Five Green Speckled Frogs* (SU-15)

# Aquatic Life

## ART

- *Cave Life* (F-18)
- *What Hatches From an Egg?* (SP-22)
- Aquatic life watercolor wash (SU-9)
- *Fishing Permits* (SU-11)
- Fish prints (SU-13)
- Frog and toad finger paint (SU-14)
- Frog and toad habitat (SU-14)
- Camouflage painting (SU-16)

## READING/WRITING

- Aquatic life class book (SU-9)
- *Joe's Choice* (SU-10)
- *Frogs and Toads* (SU-14)

## BLOCKS/PRETEND PLAY

- Ice fishing (W-11)
- Oil and water clean-up (SU-8)
- Beaver dams (SU-9)
- Conservation agent dress-up clothes (SU-11)
- Fish cooking supplies (SU-12)
- *Let's Go Fishing* (SU-12)
- Frogging (SU-12)

## LARGE MOTOR/OUTSIDE

- Move like plants/animals in water (SU-9)
- Boat on play yard (SU-12)
- Practice casting in hula hoops (SU-12)
- Play "fish and worms" (SU-12)
- *You Can't Find Me!* (SU-16)

## DISPLAY

## FIELD TRIPS

- *Aquatic Life* (SU-9)
- Fish hatchery (SU-13)

## GROUP

- *Habitat* (F-17)

## WOODWORKING

# Aquatic Life

## IDEAS TO EXPLORE

- Water in streams, rivers, creeks, and lakes supports a variety of plant and animal life.
- Water is a type of habitat.
- Some animals can live only in water while others can adapt to both land and water.

## SCIENCE

- Underwater "feely" box (SU-9)
- Water samples (SU-9)
- Live fish (SU-12)
- Observe a frog or toad (SU-14)

## MANIPULATIVE

- Sort animal cards by habitat (F-17)
- *Where Do Animals Go When it Rains?* (SP-3)
- Sort animal cards by what lives in water and what doesn't (SU-9)
- Tackle box sort (SU-12)
- Fish memory (SU-13)
- Frog and toad sort (SU-14)
- Sort animal cards by skin covering (SU-16)

## NUTRITION

- Sardines (SU-12)
- Goldfish crackers (SU-13)
- Edible frogs and toads (SU-14)
- Peanut butter play-dough creatures (SU-15)

## MUSIC

- *Habitune* (F-17)
- *Fish Song* (SU-13)
- Some have long legs (SU-14)
- *Ribbit Ribbit* (SU-14)
- *Five Green Speckled Frogs* (SU-15)



# Birds

## ART

- *Stuffed Birds* (W-4)
- Clay birds (W-4)
  - *What Hatches From an Egg?* (SP-22)
  - Make nests (SP-22)
  - Hunting permits (SU-11)

## BLOCKS/PRETEND PLAY

- Pretend to be birds (W-3)
- Bird wings (W-4)
- Binoculars (W-6)
- Conservation agent dress-up clothes (SU-11)

## LARGE MOTOR/ OUTSIDE

- Act out turkey story (F-21)
- Play "catch a turkey" (F-22)
- Experiment with different kinds of feeders (W-1)
  - Listen for bird calls (W-6)
  - *Migration Obstacles* (W-7)
  - Put out yarn for nests (SP-22)
  - *You Can't Find Me!* (SU-16)

## DISPLAY

- Bird sightings (W-1)
- Beak, feet, foods, and habitat display (W-3)
- Hang stuffed birds flying north or south (W-4)
- Bird museum (W-4)
- Bird feather exploration documentation (W-5)

## FIELD TRIPS

- Turkey farm (F-22)
- Bird watching (W-6)
- Hatchery (SP-22)
- Search for bird animal cards on hike (SU-16)

## READING/WRITING

- *Everything Needs Something to Live* (F-16)
- *See How the Turkey Grows* (F-21)
- Bird field guides (W-4)
- *Seeds, Roots, Plants* (SP-15)
- *Molly and the Forest Fire* (SP-17)

# Birds

## IDEAS TO EXPLORE

- Birds have feathers.
- Birds usually fly.
- Birds have wings.
- Birds hatch from eggs.
- Birds can be identified by their call, nest, eggs, and appearance.
- Birds are warm blooded.
- Birds usually care for their young.
- Birds can be both predator and prey.
- People eat game birds.

## SCIENCE

- Compare domestic and wild turkey feathers (F-22)
- *Bird Feeders* (W-1)
- Plant birdseed (W-1)
- *Explore a Feather* (W-5)
- Display eggshells (SP-22)

## NUTRITION

- Eat dry cereal like a bird (W-2)
- Bird nests (SP-22)
- Gummy worms (SP-22)
- Peanut butter play dough bird food (SU-15)

## MUSIC

- *I'm a Very Fine Turkey* (F-22)
- *I'm a Cardinal* (W-6)
- Bird calls (W-6)

## MANIPULATIVE

- *Tree Puzzle* (F-5)
- Bird memory (W-1)
- *Pick a Beak* (W-2)
- Sort bird animal cards by what they eat (W-2)
- *Bird Puzzles* (W-3)
- Sort bird animal cards by habitat (W-3)
- Sort bird animal cards by those that migrate and those that don't (W-7)
  - *Track Puzzles* (W-8)
  - Egg memory (SP-22)
  - Bird nest match (SP-22)
  - Sort animal cards by those that hatch from eggs and those that don't (SP-22)
  - Sort animal cards by skin type (SU-16)

## GROUP

- *Habitat* (F-17)
- Invite a turkey or waterfowl hunter to visit (F-22)
- Chart bird feeder observations (W-1)
- Discuss how a feather can be used (W-5)
- Mother bird (SP-22)

## WOODWORKING

- Put out plans for bird houses/ feeders (W-1)

# Camping

## ART

- Sponge-paint bats (F-19)
- Flower rubbings (SP-14)
- Noise makers (SP-16)
- Forest fire pictures (SP-17)
- Fishing permits (SU-11)
- Hunting permits (SU-11)
- Fish prints (SU-13)
- Frog and toad finger painting (SU-14)
- Aquatic life chalk art (SU-14)

## READING/WRITING

- Camping maps (SP-16)
- *Molly and the Forest Fire* (SP-17)
- *Joe's Choice* (SU-10)
- Fishing stories (SU-10)

## BLOCKS/PRETEND PLAY

- Binoculars (W-6)
- *Hanging Out* (SP-2)
- *Let's Go Camping* (SP-16)
- Firefighter dress-ups (SP-17)
- Conservation agent dress-up clothes (SU-11)
- *Let's Go Fishing* (SU-12)
- Fish cooking supplies (SU-12)
- Frogging (SU-12)

## LARGE MOTOR/OUTSIDE

- *Tree Skin* (F-2)
- Leaf rubbing scavenger hunt (F-2)
- Listen for bird calls (W-6)
- Campfire safety (SP-16)
- Compass use (SP-16)
- Logs and buckets of water to pretend to build and put out campfires (SP-17)
- *Ant Café* (SU-4)
- Dig fishing worms (SU-10)
- Boat on play yard (SU-12)
- Practice casting into hula hoops (SU-12)
- *You Can't Find Me!* (SU-16)
- *Foxy Predators* (SU-17)

## DISPLAY

- Forest fire pictures (SP-17)

## FIELD TRIPS

- Bird watching (W-6)
- Different types of camping areas (SP-16)
- Spider sniffing (SU-1)
- *Trash Pickup* (SU-6)
- *Aquatic Life* (SU-9)
- Search for animal cards on hike (SU-16)
- *Rock Collection* (SU-19)

# Camping

## IDEAS TO EXPLORE

- Camping is a fun way to enjoy our natural resources.
- There are rules that people need to follow to be safe and respect other campers and the wildlife.
- Camping is a way to discover and explore the natural world.
- Camping involves gathering specific equipment.

## SCIENCE

- *Worth Their Weight* (F-19)
- Charred wood and hand lenses (SP-17)

## MANIPULATIVE

- *Track Puzzles* (W-8)
- *Where Do Animals Go When it Rains?* (SP-3)
- Flower match (SP-13)
- Practice tying knots (SP-16)
- Tackle box sort (SU-12)
- Fish memory (SU-13)
- Frog and toad sort (SU-14)

## GROUP

- *Habitat* (F-17)
- Demonstrate campfire safety (SP-16)
- RV visit (SP-16)
- Brainstorm camping first aid kit (SP-16)
- Invite fire fighter or Smokey Bear (SP-17)
- *Trash Pickup* (SU-6)

## NUTRITION

- Trail mix (SP-16)
- Goldfish crackers (SU-13)
- Edible frogs and toads (SU-14)
- Edible rocks (SU-22)

## MUSIC

- *Habitune* (F-17)
- *Hairy Not Scary* (F-19)
- *I'm a Little Fox Squirrel* (F-20)
- *Who Am I?* (SP-20)
- *The Lights Go On* (SU-3)
- *Fish Song* (SU-13)
- Frogs and toads song (SU-14)

## WOODWORKING

- Flower press (SP-14)



# Caves

## ART

- *Cave Life* (F-18)
- Cave models (F-18)
- Sponge-paint bats (F-19)
- Granite paper (SU-19)

## READING/WRITING

## BLOCKS/PRETEND PLAY

- Bicycle helmet "caving hat" with flashlight taped on top and other special caving gear (F-18)
- Build shelters for animals hibernating (W-9)

## LARGE MOTOR/ OUTSIDE

- Blindfolded obstacle course (F-19)

## DISPLAY

## FIELD TRIPS

- Cave (F-18)
- *Aquatic Life* (SU-9)
- *Rock Collection* (SU-19)

## GROUP

- *Habitat* (F-17)
- Caving expert (F-18)
- Echo experiment (F-19)

## WOODWORKING

# Caves

## IDEAS TO EXPLORE

- Caves support a variety of wildlife.
- Caves are a special type of habitat.
- Different areas of the cave provide different types of habitat.
- People and most mammals live in the twilight zone of caves.
- Caves are made of rock.
- Missouri is the Cave State.

## SCIENCE

- *Worth Their Weight* (F-19)
- Crystal garden (SU-20)

## MANIPULATIVE

- Sort animal cards by those who live in caves and those who don't (F-18)
- *Track Puzzles* (W-8)
- *Where Do Animals Go When it Rains?* (SP-3)

## NUTRITION

- Bat fruit leather (F-19)

## MUSIC

- *Habitune* (F-17)
- *Hairy Not Scary* (F-19)

# Energy

## ART

- Energy collages (W-15)
- Sun pictures (W-18)
  - Warm and cool color collage (W-18)
- Discuss recycled art materials used in art (W-20)
- Winter fabric collage (W-23)
- Winter clothing collage (W-23)
  - *What Goes in the Wind?* (SP-4)
- Wind chimes (SP-4)
- Blow painting (SP-4)

## READING/WRITING

- *B, T, and U* (W-15)
- *Fred's Forest* (W-21)

## BLOCKS/PRETEND PLAY

- Refueling station for cars and trucks (W-16)
- *Grocery Shopping* (W-20)
- Cotton batting to insulate buildings (W-22)
- *Hanging Out* (SP-2)

## LARGE MOTOR/ OUTSIDE

- Refueling station for riding toys (W-16)
- Snow painting (W-18)
- Touch light and dark cars on sunny day (W-18)
- Photo paper pictures (W-18)
- Water paint (SP-2)
- Fly a kite (SP-4)
- *Shadow Hunt* (SP-5)

## DISPLAY

- Pictures of people using energy (W-18)
- People in seasonal clothing (W-23)
- Pictures of wind use (SP-4)

## FIELD TRIPS

- Power plant, service station, grocery store (W-14)
- Wood stove store (W-17)
- Construction site to look at insulation (W-22)

## GROUP

- *What Is Energy?* (W-14)
- Read electric meter (W-16)
- *No Electricity* (W-17)
- Discuss animal coat changes (W-18)
- *Saving Energy* (W-19)

## WOODWORKING

- Take apart broken appliances (W-14)

# Energy

## IDEAS TO EXPLORE

- Energy can be generated in a variety of ways.
- Energy is important for survival.
- Energy should be used wisely.

## SCIENCE

- Static electricity experiments (W-14)
- Compare plants placed in sunny place and dark place (W-15)
- Wind-up toys (W-16)
- *Does the Sun Give Us Energy?* (W-18)
- *Insulation* (W-22)
- *Winter Fabrics* (W-23)

## MANIPULATIVE

- *Energy Puzzles* (W-16)
- Match gloves and mittens (W-23)

## NUTRITION

- Discuss refueling energy during snacks/meals (W-14)
- Sun tea (W-15)
- Dry fruits (W-18)

## MUSIC

- *Row, Row, Row Your Boat* (W-16)



# Fish

## ART

- *Cave Life* (F-18)
- *What Hatches From an Egg?* (SP-22)
- Fish watercolor wash (SU-9)
- *Fishing Permits* (SU-11)
- Fish prints (SU-13)
- Camouflage paint (SU-16)

## READING/WRITING

- *Joe's Choice* (SU-10)
- Fishing stories (SU-10)
- *Frogs and Toads* (SU-14)

## SCIENCE

- Underwater "feely" box (SU-9)
- Water samples (SU-9)
- Observe fish (SU-12)

## NUTRITION

- Sardine tasting (SU-12)
- Goldfish crackers (SU-13)
- Peanut butter play dough fish food (SU-15)

## BLOCKS/PRETEND PLAY

- Ice fishing (W-11)
- Oil and water clean-up (SU-8)
- Conservation agent dress-up clothes (SU-11)
- *Let's Go Fishing* (SU-12)
- Fish cooking supplies (SU-12)

## LARGE MOTOR/ OUTSIDE

- Move like fish (SU-9)
- Dig fishing worms (SU-10)
- Practice casting (SU-12)
- Play "fish and worms" (SU-12)
- *You Can't Find Me!* (SU-16)

## MANIPULATIVE

- Sort animals cards by which ones hatch from eggs (SP-22)
- Tackle box sort (SU-12)
- Fish memory (SU-13)
- Sort animal cards by skin covering (SU-16)

## MUSIC

- *Fish Song* (SU-13)
- *Five Green Speckled Frogs* (SU-15)

# Fish

## IDEAS TO EXPLORE

- Fish need a water habitat.
- Scales cover fish bodies.
- Fish breathe with gills.
- Fish eyes are usually on the sides of the head.
- Fish have fins.
- Fish lay eggs in water.
- Fish are both predator and prey.
- People like to catch, cook, and eat fish.

## DISPLAY

## FIELD TRIPS

- *Aquatic Life* (SU-9)
- Fishing (SU-12)
- Fish hatchery (SU-13)

## GROUP

- *Habitat* (F-17)

## WOODWORKING

# Food Chains

## ART

- *Fishing Permits* (SU-11)
- Hunting permits (SU-11)
- Camouflage art (SU-16)

## BLOCKS/PRETEND PLAY

- *Let's Go Fishing* (SU-12)
- Fish cooking supplies (SU-12)
- Frogging (SU-12)

## LARGE MOTOR/ OUTSIDE

- Explore leaf litter (F-16)
- Play "catch a turkey" (F-22)
- Compost pile (SP-7)
- *Spider Web Toss* (SU-2)
- Play "fish and worms" (SU-12)
- *You Can't Find Me!* (SU-16)
- *Foxy Predators* (SU-17)

## READING/WRITING

- *Everything Needs Something to Live* (F-16)
- *See How the Turkey Grows* (F-21)
- *Willie the Woodchuck* (W-9)
- *Seeds, Roots, Plants* (SP-15)
- *Joe's Choice* (SU-10)
- *Frogs and Toads* (SU-14)

# Food Chains

## IDEAS TO EXPLORE

- People and animals get their food from plants and/or other animals.
- Predators look for prey to eat.
- Food sources are an important part of habitat.
- Some predators help people.
- Prey have defenses to help protect them from predators.
- Predators and prey need each other.

## MANIPULATIVE

- Sort animal cards by habitat (F-17)
- Sort animal cards by skin covering (SU-16)
- Match predator to prey animal cards (SU-17)

## SCIENCE

- *Worth Their Weight* (F-19)
- *Explore a Log* (SP-8)
- Observe a turtle or frog and try to feed bugs or worms (SU-15)

## NUTRITION

- *Animal Harvest* (F-15)
- Peanut butter play dough spiders/insects (SU-2)
- Discuss source of snack or lunch food (SU-17)
- *Harvest Time* (SU-18)
- Serve honey on biscuits (SU-18)

## MUSIC

- *I'm a Little Fox Squirrel* (F-20)
- *Who Am I?* (SP-20)
- *Ribbit Ribbit* (SU-14)
- *Five Green Speckled Frogs* (SU-15)

## DISPLAY

## FIELD TRIPS

- *Aquatic Life* (SU-9)
- Find hidden animal cards on hike (SU-16)

## GROUP

- *Habitat* (F-17)
- Discuss predator/prey relationships (SU-17)
- Create a food chain (SU-17)

## WOODWORKING



# Harvest

## ART

- Fishing permits (SU-11)
- Hunting permits (SU-11)

## BLOCKS/PRETEND PLAY

- Toy farm equipment (F-11, SU-18)
- Farmer dress-up clothes (F-11, SU-18)
- Produce-stand props (F-11)
- Empty frozen and canned food containers (F-12)
- *Let's Go Fishing* (SU-12)
- Frogging (SU-12)
- Wheat, soybeans, or corn in sensory table (SU-18)

## LARGE MOTOR/ OUTSIDE

- Observe farmers harvesting crops (F-11)
- Play "worm through an apple" (F-13)
- Play "catch a turkey" (F-22)

## DISPLAY

- Farm equipment with labels (F-11)
- Seed chart (F-14)
- Pictures of wheat from seed to plant to product (SU-18)

## READING/WRITING

- *The Harvest* (F-11)
- Missouri food books (F-11)
- Johnny Appleseed books (F-13)
- *Everything Needs Something to Live* (F-16)
- *See How the Turkey Grows* (F-21)
- *B, T, and U* (W-15)
- *Joe's Choice* (SU-10)
- *The Little Red Hen* (SU-18)

## FIELD TRIPS

- Farm, farm-implement store, grocery store, farmer's market or feed store (F-11, SU-18)
- Apple orchard (F-13)
- Pumpkin patch (F-14)
- Poultry farm (F-22)

# Harvest

## IDEAS TO EXPLORE

- People harvest plants and animals.
- There are many ways to store and preserve harvest.
- People have many purposes for harvested products.
- Farmers harvest plants and animals to earn money.

## SCIENCE

- *Something Corny* (F-12)
- Apple tasting (F-13)
- Oxidation of an apple (F-13)
- Examine wool, feathers, honeycomb, etc. (F-15)

## MANIPULATIVE

- Fruit and vegetable memory (F-11)
- Grind corn (F-12)
- Count seeds and weigh apples (F-13)
- Line up pumpkins biggest to smallest (F-14)
- Plant and animal product puzzles (F-15)
- Grind wheat (SU-18)

## GROUP

- *Baby Plants* (F-14)

## NUTRITION

- Vegetable or stone soup (F-11)
- Popcorn (F-12)
- Johnny cakes (F-12)
- *Apple Pizzas* (F-13)
- Apple dishes (F-13)
- *Animal Harvest* (F-15)
- Discuss where food comes from during snacks and meals (F-15, SU-17)
- Make butter (F-15)
- *Harvest Time* (SU-18)
- Serve honey on biscuits (SU-18)

## MUSIC

- *Fish Song* (SU-13)

## WOODWORKING

- *Woodworking Comparisons* (F-6)

# Insects, Spiders, and Crawly Creatures

## ART

- *Cave Life* (F-18)
- Sock soil creatures (SP-11)
- Insect creations (SP-18)
- Symmetrical butterfly painting (SP-19)
- Butterfly and moth sketches (SP-19)
- *What Hatches From an Egg?* (SP-22)
- Create spiders (SU-1)
- Draw spider webs with chalk (SU-2)
- Sketch roly-polies (SU-5)
- Camouflage painting (SU-16)

## READING/WRITING

- *Everything Needs Something to Live* (F-16)
- *See How the Turkey Grows* (F-21)
- Butterfly/moth books (SP-19)
- *Frogs and Toads* (SU-14)

## SCIENCE

- *Worth Their Weight* (F-19)
- *Explore a Log* (SP-8)
- Worm ranch (SP-11)
- Observe worm tracks (SP-11)
- *What's an Insect?* (SP-18)
- Observe grasshoppers jumping (SP-18)
- Compare insects and spiders (SP-18)
- Observe caterpillars (SP-19)
- *What Has Eight Legs?* (SU-1)
- Spider collection (SU-2)
- Firefly experiment (SU-3)
- Compare beetles (SU-3)
- *Roly-Poly Paradise* (SU-5)

## NUTRITION

- Marshmallow and pretzel spiders and insects (SU-1)
- Peanut butter play dough spiders and insects (SU-2)
- Serve honey (SU-18)

## BLOCKS/PRETEND PLAY

- Soil and creatures in sensory table (SP-11)
- Dress and move like soil creatures (SP-11)
- Butterfly/moth dress-up props (SP-19)
- Glove spider puppets (SU-1)

## LARGE MOTOR/OUTSIDE

- Explore leaf litter (F-16)
- *What Lives in the Soil?* (SP-11)
- Look for worms after a rain (SP-11)
- Do bee dances to communicate with each other (SP-18)
- Listen for insect sounds (SP-18)
- Act out butterfly/moth metamorphosis (SP-19)
- Look for butterflies/moths (SP-19)
- Butterfly nets (SP-19)
- *Spider Web Toss* (SU-2)
- Adopt a spider (SU-2)
- Observe fireflies blinking and try to trick with flashlight (SU-3)
- *Ant Café* (SU-4)
- Insect scavenger hunt (SU-4)
- *You Can't Find Me!* (SU-16)

## MANIPULATIVE

- *Where Do Animals Go When it Rains?* (SP-3)
- Sort animal cards by number of legs (SU-1)
- Spider web lotto (SU-2)
- Sort animal cards by skin covering (SU-16)

## MUSIC

- *My Friend Little Caterpillar* (SP-19)
- *Itsy Bitsy Spider* (SU-1)
- *The Lights Go On* (SU-3)
- *Ribbit Ribbit* (SU-14)
- *Five Green Speckled Frogs* (SU-15)

## Insects, Spiders, and Crawly Creatures

### IDEAS TO EXPLORE

- Insects and spiders are similar but different.
- Insects have six legs, three body parts and wings.
- Spiders have eight legs, two body parts and build webs.
- Insects and spiders can be helpful and harmful to people.
- Spiders can be classified by their web.
- Insects and spiders have certain habitat needs.
- Not all crawly creatures are insects or spiders.
- Insects and spiders can be predators and prey.

## DISPLAY

- Insect pictures (SP-18)

## FIELD TRIPS

- Rotting stump (SP-18)
- Spider sniffing (SU-1)
- Spider web painting (SU-1)
- Capture fireflies (SU-3)
- Roly-poly expedition (SU-5)
- *Aquatic Life* (SU-9)
- Search for insect/spider animal cards on hike (SU-16)

## GROUP

- *Habitat* (F-17)
- Invite entomologist to visit (SU-4)

## WOODWORKING



# Land use

## ART

- Winter activity collages (W-11)
- Snow sculptures (W-11)
  - Noise makers (SP-16)
  - *Fishing Permits* (SU-11)
  - Hunting permits (SU-11)

## READING/WRITING

- *The Harvest* (F-11)
- Missouri food books (F-11)
- *See How the Turkey Grows* (F-21)
- *B, T, and U* (W-15)
- *Fred's Forest* (W-21)
- *Molly and the Forest Fire* (SP-17)
- *Joe's Choice* (SU-10)

## SCIENCE

- *Something Corny* (F-12)
- Experiment with water soluble and plastic foam peanuts (SU-6)
- *What Is a Mineral?* (SU-20)

## NUTRITION

- Vegetable or stone soup (F-11)
  - *Animal Harvest* (F-15)
  - *Harvest Time* (SU-18)
- Cut biscuits with farm animal cutters (SU-18)

## BLOCKS/PRETEND PLAY

- Build neighborhood with blocks (F-1)
- Make block map of neighborhood (F-1)
- Community helper dress-up clothes (F-1)
- Produce stand props (F-11)
- Farm equipment (F-11, SU-18)
- Ice fishing (W-11)
- Snowmobiles (W-11)
- Gardening equipment (SP-12)
- *Flower Shop* (SP-13)
- *Let's Go Camping* (SP-16)
- Garbage collection (SU-4)
- Dump trucks and cranes to haul trash (SU-6)
- Sort trash (SU-6)
- *Let's Go Fishing* (SU-12)
- Frogging (SU-12)
- Mining dress-ups (SU-20)
- Concrete/construction props (SU-21)
- Pea gravel in sensory table (SU-21)

## LARGE MOTOR/OUTSIDE

- Look for farmers harvesting crops (F-11)
  - Play "catch a turkey" (F-22)
  - *Skaters Away* (W-11)
  - Snow shovels (W-11)
  - Winter Olympics (W-11)
  - Refueling station for riding toys (W-16)
  - Compost pile (SP-7)
  - Tractors in sand box (SP-12)
- Boat on play yard (SU-12)
  - Practice casting (SU-12)
  - *Concrete Hand Prints* (SU-21)

## DISPLAY

- Farm equipment pictures (F-11)
- Outdoor seasonal sports (W-11)
- Garden planting (SP-12)
- Litter scene (SU-6)

## FIELD TRIPS

- *What Can You See?* (F-1)
- Various types of land use (F-1)
- Same land use type in different seasons (F-1)
- Farm, grocery store, farmer's market or feed store (F-11)
- Apple orchard (F-13)
- Pumpkin patch (F-14)
- Poultry farm (F-22)
- Power plant or service station (W-14)
- *Trash Pickup* (SU-6)
- Recycling plant, landfill (SU-6)
- Go fishing (SU-12)
- Rock quarry (SU-21)

## GROUP

- *Habitat* (F-17)
- *Saving Energy* (W-19)
- *What Is Erosion* (SP-10)
- Recycling bins in the classroom (SU-6)

## WOODWORKING

- *Woodworking Comparisons* (F-6)

# Land Use

## IDEAS TO EXPLORE

- People choose to use land in many different ways.
- Land is a natural resource.
- People need to carefully consider how they use land.
- People and animals are dependent on land.

## MANIPULATIVE

- Sort animal cards by habitat (F-17)

## MUSIC

- *Habitune* (F-17)
- Sing "this is the way we shovel the snow" (W-11)
- *Fish Song* (SU-13)

# Mammals

## ART

- *Cave Life* (F-18)
- Sponge paint bats (F-19)
  - Paint tracks with bare feet (W-8)
  - Stamp animal tracks (W-8)
  - Hunting permits (SU-11)
  - Camouflage painting (SU-15)

## READING/WRITING

- *Everything Needs Something to Live* (F-16)
- *See How the Turkey Grows* (F-21)
- *Willie the Woodchuck* (W-9)
- *Seeds, Roots, Plants* (SP-15)
- *Molly and the Forest Fire* (SP-17)

## SCIENCE

- *Worth Their Weight* (F-19)
- Track identification (W-8)
- Smell match (SP-21)

## NUTRITION

- Bat fruit leather (F-19)
- Eat like mammals preparing to hibernate (W-9)
- Rabbit food (SP-20)
- Identify lunch or snack foods by smell (SP-21)
- Peanut butter play dough (SU-15)

## BLOCKS/PRETEND PLAY

- Shelters for animals to hibernate (W-9)
- Baby animals and their mothers (SP-21)
- Materials for beaver dams (SU-9)
- Conservation agent dress-up clothes (SU-11)

## LARGE MOTOR/OUTSIDE

- Blindfold obstacle course (F-19)
- Pretend to be squirrels (F-20)
- Look for tracks on play ground (W-8)
- Make tracks in snow for others to follow (W-8)
- Match boots to tracks (W-8)
- Collect tracks on peanut-butter covered cookie sheets (W-8)
- Find places to hibernate (W-9)
- Find warmer/colder places on play yard (W-9)
- Bunny hop races (SP-20)
  - *You Can't Find Me!* (SU-16)
  - *Foxy Predators* (SU-17)

## MANIPULATIVE

- *Track Puzzles* (W-8)
- Sort animal cards by those that hibernate and those that don't (W-9)
- *Where Do Animals Go When it Rains?* (SP-3)
- Match adult animals with offspring (SP-21)
- Sort animal cards by skin covering (SU-16)
- Match predators and prey (SU-17)

## MUSIC

- *Habitune* (F-17)
- *Hairy Not Scary* (F-19)
- *I'm a Little Fox Squirrel* (F-20)
- *Who Am I?* (SP-20)

## DISPLAY

- Shoe track rubbings (W-8)
- Baby animals and their mothers (SP-21)

## FIELD TRIPS

- Look for squirrel sign (F-20)
- Look for tracks (W-8)
- Farm with baby animals (SP-21)
- Search for mammal animal cards on hike (SU-16)

## GROUP

- *Habitat* (F-17)
- Echo experiments (F-19)
- Where do animals store food? (F-20)
- *Do You Smell My Mother?* (SP-21)

## WOODWORKING

## Mammals

### IDEAS TO EXPLORE

- Mammals are warm-blooded.
- Mammals bear live young.
- Mammals nurse their young.
- Mammals have hair or fur on their bodies.
- Mammals have a keen sense of smell.
- Mammals have certain habitat requirements.
- Some mammals are predator, some are prey, some are both.
- Mammals can be identified by their tracks and scat.



# Plants and Flowers

## ART

- Milkweed seed collages (F-10)
- Flower collages (SP-13)
- Dandelion rubbings (SP-14)

## READING/WRITING

- *The Harvest* (F-11)
- *B, T, and U* (W-15)
- *Seeds, Roots, Plants* (SP-15)

## BLOCKS/PRETEND PLAY

- Produce-stand props (F-11)
- *Flower Shop* (SP-13)
- Silk flowers to plant in block gardens (SP-13)
- Soil and flowers in sensory table (SP-13)
- Farmer dress-ups (SU-18)

## LARGE MOTOR/ OUTSIDE

- *Nature Jar* (F-9)
- Look for dormant plants (W-9)
- Tractors in sand (SP-12)
- Class dandelion (SP-14)
- Find and identify parts on plants (SP-15)
- Compare and count plants leaves and flower petals (SP-15)

## DISPLAY

- Seed and plant chart (F-14)
- Fabric-fastener garden (SP-12)
- Pictures of wheat from seed to harvest (SU-18)

## FIELD TRIPS

- Pumpkin patch (F-14)
- Moss hunt (SP-12)
- Wildflower habitat (SP-13)
- *Flower Shop* (SP-13)

## GROUP

- *Baby Plants* (F-14)
- *Habitat* (F-17)
- *What Is Erosion?* (SP-10)
- *Dandelion Potpourri* (SP-14)

## WOODWORKING

- Flower press (SP-14)

## Plants and Flowers

### IDEAS TO EXPLORE

- Plants are an essential part of the food chain.
- Plants often need insects and animals.
- Plants have habitat requirements.
- Plant reproduce with flowers and/or seeds.
- Plants can be identified by their flower.
- Flowers have a purpose for the plant's survival.
- Plants and flowers have many identifiable parts.
- People use plants and flowers for many different things.

## SCIENCE

- *Hang On!* (F-3)
- *Do Trees Get Drinks?* (F-4)
- Plant milkweed (F-10)
- *How Does Your Garden Grow?* (SP-12)
- Plants seeds in various soils (SP-12)
- Water plants with different liquids (SP-12)
- Favorite flower survey (SP-13)
- Force bulbs (SP-15)
- Color Queen Anne's Lace (SP-15)

## MANIPULATIVE

- Flower match or memory (SP-13)
- Seed and plant match (SP-15)
- Plant puzzle (SP-15)

## NUTRITION

- *Harvest Time* (SU-18)

## MUSIC

- *I'm a Little Milkweed Cradle* (F-10)

# Recycling/Pollution

## ART

- Energy collages (W-15)
- Sun pictures (W-18)
- Discuss recycled materials used in art (W-20)
- Litter bags (SU-6)

## READING/WRITING

- *B, T, and U* (W-15)
- *Fred's Forest* (W-21)

## SCIENCE

- Filter snow (W-10)
- Experiment with water soluble peanuts (SU-6)
- *What's in the Air?* (SU-8)

## NUTRITION

- Sun tea (W-15)

## BLOCKS/PRETEND PLAY

- Refueling stations for cars and trucks (W-16)
- *Grocery Shopping* (W-20)
- Dump trucks and cranes to haul trash (SU-6)
- Sort trash (SU-6)
- Garbage collector props (SU-6)
- Oil and water in sensory table with plastic animals (SU-8)

## LARGE MOTOR/ OUTSIDE

- Refueling station for riding toys (W-16)
- Compost pile (SP-7)

## Recycling/ Pollution

### IDEAS TO EXPLORE

- Caring for our natural resources is important.
- People can recycle to prevent waste.
- Pollution is ugly and harmful to people, plants and animals.
- Conservation means using our natural resources wisely.

## MANIPULATIVE

## MUSIC

## DISPLAY

- Documentation from *Where Do All the Dead Leaves Go?* (SP-7)
- Outdoor scene with litter (SU-6)

## FIELD TRIPS

- Signs of erosion (SP-10)
- *Trash Pickup* (SU-6)
- Recycling plant (SU-6)
- Landfill (SU-6)
- Check leaves in ditch (SU-8)

## GROUP

- *Habitat* (F-17)
- *What Is Energy?* (W-14)
- *No Electricity* (W-17)
- *Saving Energy* (W-19)
- *Where Do All the Dead Leaves Go?* (SP-7)
- *What Is Erosion?* (SP-10)
- Recycling bins in classroom (SU-6)

## WOODWORKING

- Take apart broken appliances (W-14)



# Rocks

## ART

- *Cave Life* (F-18)
- Granite paper (SU-19)
- Watercolor rocks (SU-22)

## READING/Writing

## BLOCKS/PRETEND PLAY

- Rock-hound props (SU-19)
- Mining clothes (SU-20)
- Concrete trucks (SU-21)
- Construction-worker props (SU-21)
- Pea gravel in sensory table (SU-21)

## LARGE MOTOR/ OUTSIDE

- Build kiln for firing clay (SP-9)
- Look for new rocks after a hard rain (SU-19)
- *Concrete Hand Prints* (SU-21)

## DISPLAY

- Transcribe rock discussion and display with pictures of children experimenting with rocks (SU-22)

## FIELD TRIPS

- Cave (F-18)
- Dig clay (SP-9)
- *Rock Collection* (SU-19)
- Art or anthropology museum (SU-19)
- Rock quarry (SU-21)
- Pouring concrete (SU-21)

## GROUP

- Label things around room made from minerals (SU-20)

## WOODWORKING

# Rocks

## IDEAS TO EXPLORE

- There are many kinds of rocks.
- People use rocks for many things.
- People and nature can make rocks shiny.
- Rocks are an important natural resource.

## SCIENCE

- *What Is Soil?* (SP-6)
- Weigh rocks (SU-19)
- Rock "feely" box (SU-19)
- *What Is a Mineral?* (SU-20)
- Crystal garden (SU-20)
- Rock display (SU-21)
- *The Quest For Shiny Rocks* (SU-22)
- Rock tumbler (SU-22)

## NUTRITION

- Jell-O gemstones and Rice Krispie rocks (SU-22)

## MUSIC

## MANIPULATIVE

- Grind wheat or corn with rocks (SU-18, F-12)
- Sort rocks by color, shape, size or texture (SU-19)
- Rock memory (SU-19)

# seeds

## ART

- Seed collages (F-9)
- Milkweed collages (F-10)

## READING/WRITING

- *The Harvest* (F-11)
- Make Missouri food books (F-12)
- *Seeds, Roots, Plants* (SP-15)

## BLOCKS/PRETEND PLAY

- Pretend to be seeds and disperse (F-10)
- Farming equipment (F-11)
- Gardening props (SP-12)

## LARGE MOTOR/ OUTSIDE

- *Nature Jar* (F-9)
- Compare available playground berries/seeds to store-bought bird seed (F-9)
- Blow on seeds that travel in the wind (F-10)
- Look for seeds that travel in the wind (F-10)
- Blow on dandelion gone to seed (SP-14)
- Class dandelion (SP-14)

## DISPLAY

- Seed chart (F-14)
- Pictures of wheat from seed to harvest (SU-18)

## FIELD TRIPS

## GROUP

- Play "what's missing" with seeds (F-9)
- *Baby Plants* (F-14)
- *Habitat* (F-17)
- Discuss where animals bury food (F-20)

## WOODWORKING

# Seeds

## IDEAS TO EXPLORE

- Seeds are the way plants reproduce.
- Seeds have many ways of traveling.
- Seeds are a food source for many animals and people.
- Seeds grow into plants when planted.
- Most plants produce many seeds.

## SCIENCE

- Weigh, measure, and compare seeds (F-9)
- Examine milkweed (F-10)
- Plant milkweed seeds (F-10)
- Sort seeds by how they are dispersed (F-10)
- *Something Corny* (F-12)
- Soak pumpkin/squash seeds (F-14)
- *Bird Feeders* (W-1)
- Plant bird seed (W-1)
- *How Does Your Garden Grow?* (SP-12)

## MANIPULATIVE

- Grind corn (F-12)
- Count seeds and weigh apples (F-13)
- Seed and plant match (SP-15)
- Grind wheat (SU-18)

## NUTRITION

- "Seed of the day" snacks (F-9)
- Popcorn (F-12)
- Pumpkin seeds (F-14)
- *Harvest Time* (SU-18)

## MUSIC

- *I'm a Little Milkweed Cradle* (F-10)
- *I'm a Little Fox Squirrel* (F-20)
- *I'm a Very Fine Turkey* (F-22)



# Soil

## ART

- Mud paint (SP-9)
- Sock soil creatures (SP-11)

## BLOCKS/PRETEND PLAY

- Farm equipment (F-11)
- Farmer dress-ups (F-11)
- Soil and creatures in sensory area (SP-11)
- Pretend to be soil creatures (SP-11)
- Gardening props (SP-12)

## LARGE MOTOR/ OUTSIDE

- Explore leaf litter (F-16, SP-7)
- Create a compost pile (SP-7)
- *Mud Pies* (SP-9)
- *What Lives in the Soil?* (SP-11)
- Look for worms after a rain (SP-11)

## READING/WRITING

- *The Harvest* (F-11)
- *Everything Needs Something to Live* (F-16)
- Class mud pie recipe book (SP-9)
- *Seeds, Roots, Plants* (SP-15)

# Soil

## IDEAS TO EXPLORE

- People use soil for many purposes.
- Plants need soil to grow.
- Plants keep soil in place.
- Soil is made up of ground up rocks and plants and animal matter.
- Many creatures live in and help soil.
- There are different types of soil.
- Soil will erode if we don't take care of it.

## MANIPULATIVE

## SCIENCE

- *Hang On!* (F-3)
- Place rotting leaves in sensory table (F-16)
- *What Is Soil?* (SP-6)
- Experiment with packing peanuts (SP-7)
- *Explore a Log* (SP-8)
- Make mud pies with different types of soil (SP-9)
- Worm ranch (SP-11)
- Observe worm tracks (SP-11)
- *How Does Your Garden Grow?* (SP-12)
- Plant seeds in various soils (SP-12)

## NUTRITION

## MUSIC

## DISPLAY

- Documentation from *Where Do All the Dead Leaves Go?* (SP-7)
- Documentation from *What Is Erosion?* (SP-10)

## FIELD TRIPS

- Site with exposed tree roots (F-4)
- Dig clay (SP-9)
- Look for erosion (SP-10)

## GROUP

- *Where Do All the Dead Leaves Go?* (SP-7)
- *What Is Erosion?* (SP-10)

## WOODWORKING

# Trees and Forests

## Trees and Forests

### IDEAS TO EXPLORE

- Trees are beneficial to people and animals in many ways (provide shade, habitat, clean the air, hold soil in place, food, etc.)
- People sometimes harvest trees.
- Trees are a renewable resource.
- Trees can be identified by leaf, bark, seeds, nuts, etc.
- Trees have several parts.
- Trees can be destroyed by fire.

### ART

- Construction paper trees (F-5)
- Embellish transparency trees (F-7)
- Leaf portraits (F-8)
- Leaf collages (F-8)
- Leaf prints (F-8)
- Foil leaf prints (F-8)
- Leaf rubbings (F-8)
- Water color leaves (F-8)
- Leaf creatures (F-8)
- Forest-fire pictures (SP-17)

### READING/Writing

- Class tree-bark rubbing/leaf book (F-2)
- *Tree Books* (F-7)
- Small, individual tree books (F-7)
- Johnny Appleseed (F-13)
- *Everything Needs Something to Live* (F-16)
- *See How the Turkey Grows* (F-21)
- *Fred's Forest* (W-21)
- *Molly and the Forest Fire* (SP-17)

### SCIENCE

- Examine tree cookies (F-2)
- *Hang On!* (F-3)
- *Do Trees Get Drinks?* (F-4)
- Soak leaves in water (F-4)
- Apple tasting (F-13)
- *Bird Feeders* (W-1)
- *Explore a Log* (SP-8)
- Examine charred wood (SP-17)

### NUTRITION

- Drink with straws and compare straw with trunk of tree pulling up nutrients from the roots (F-4)
- Serve tree fruits and nuts (F-6)
- *Apple Pizzas* (F-13)

### BLOCKS/PRETEND PLAY

- Carpenter props (F-6)
- Tree-surgeon props (F-6)
- Add twigs and clay to blocks to represent trees for buildings (F-7)
- Firefighter props (SP-17)

### LARGE MOTOR/OUTSIDE

- *Tree Skin* (F-2)
- Bark-rubbing treasure hunt (F-2)
- Look for tree roots (F-3)
- Adopt a tree (F-7)
- Look for signs of wildlife using trees (F-7)
- Wet leaf prints (F-8)
- Leaf color hunt (F-8)
- *Nature Jar* (F-9)
- Explore leaf litter (F-16, SP-7)

### MANIPULATIVE

- *Tree Puzzle* (F-5)
- Sort animal cards by those that live in trees and those that don't (F-7)
- *Leaf Lotto* (F-8)
- Leaf memory (F-8)
- Sort leaves (F-8)
- Weigh and measure apples (F-13)
- Apple peeler (F-13)
- *Where Do Animals Go When it Rains?* (SP-3)

### MUSIC

- *What Kind of Tree Are You?* (F-5)
- *I'm a Little Fox Squirrel* (F-20)
- *I'm a Very Fine Turkey* (F-22)

### DISPLAY

- Tree-bark rubbings and leaf match (F-2)
- Documentation from *Hang On!* experiment (F-3)
- Forest-fire pictures (SP-17)

### FIELD TRIPS

- Look for exposed tree roots (F-3)
- Lumber yard, sawmill, cabinet shop or musical instrument maker (F-6)
- Apple orchard (F-13)
- Forest (W-21)
- Rotting log (SP-8)
- Campsite to build fire (SP-17)

### GROUP

- Invite fiddler or woodworker to visit (F-6)
- Find leaf partners (F-8)
- *Habitat* (F-17)
- Discuss forest products (W-21)
- *Where Do All the Dead Leaves Go?* (SP-7)
- *Explore a Log* (SP-8)

### WOODWORKING

- *Woodworking Comparisons* (F-6)



# Weather

## ART

- Ice-cube painting (W-10)
- Snow pictures (W-10)
- Cut and decorate snowflakes (W-10)
- Collage of people/animals in various seasons (W-11)
- Plastic foam snow sculptures (W-11)
- Snow shakers (W-11)
- Ice sculptures (W-11)
- Clothing collages (W-12)
- Fabric collages (W-23)
- Cloud pictures (SP-1)
- Storm painting (SP-1)
- Rainbows (SP-1)
- *What Goes in the Wind?* (SP-4)
- Blow painting (SP-4)
- Add shadows to drawings (SP-5)

## READING/WRITING

- *See How the Turkey Grows* (F-21)
- *Willie the Woodchuck* (W-9)
- *B, T, and U* (W-15)
- *Fred's Forest* (W-21)
- *Drip and Drop* (SP-1)
- *Seeds, Roots, Plants* (SP-15)

## BLOCKS/PRETEND PLAY

- Hibernation cave (W-9)
- Foam packing snow (W-10)
- Sift "snow" over buildings (W-10)
- Ice fishing (W-11)
- Carpet sleds (W-11)
- Snowmobiles (W-11)
- Weather station (W-12)
- Seasonal clothing (W-12)
- Rain gear (SP-1)
- *Hanging Out* (SP-2)
- Add shelters for animals in rain (SP-3)

## LARGE MOTOR/OUTSIDE

- Measure snow depth (W-10)
- *Skaters Away* (W-11)
- Newspaper snowball fight (W-11)
- Freeze tag (W-11)
- Winter Olympics (W-11)
- Shovel snow (W-11)
- Look for animal activity patterns in different seasons (W-12)
- Rainbow dance (SP-1)
- Observe shapes/movements of clouds (SP-1)
- Pretend to be raindrops (SP-1)
- Rain gauge (SP-1)
- Water paint (SP-2)
- Kites (SP-4)
- Bubbles (SP-4)
- *Shadow Hunt* (SP-5)
- Play "lose your shadow" or "shadow tag" (SP-5)

## DISPLAY

- Outdoor seasonal activities (W-11)
- Seasonal scenes (W-12)
- Animals in seasonal environments (W-12)
- Children in seasonal clothing (W-23)
- Clouds and children's ideas about them (SP-1)
- Shadow pictures (SP-5)

## FIELD TRIPS

- Ice rink (W-11)
- Walk in the rain (SP-1)

# Weather

## IDEAS TO EXPLORE

- Weather changes with each season.
- Weather forces people and animals to change and adapt.
- Seasons are predictable.
- Shadows are related to the sun or other light source.

## SCIENCE

- Filter snow (W-10)
- Explore snow in sensory table (W-10)
- *What's the Temperature?* (W-12)
- *Insulation* (W-22)
- *Winter Fabrics* (W-23)
- Prism rainbows (SP-1)
- Make a cloud (SP-1)
- Cloud diary (SP-1)
- Rainfall chart (SP-1)
- Observe a puddle (SP-2)
- Draw around shadows at different times of day (SP-5)
- Add color to shadows (SP-5)

## NUTRITION

- Marshmallow or mashed potato snow sculptures (W-11)
- Cloud snacks (SP-1)
- Animal crackers and water (SP-3)

## MANIPULATIVE

- *Tree Puzzle* (F-5)
- Sort pictures of children in clothing appropriate for different seasons (W-12)
- Match animal cards with seasonal habitat (W-12)
- *Where Do Animals Go When it Rains?* (SP-3)
- Animal and shadow match (SP-5)

## GROUP

- Take the temperature (W-12)
- Graph seasonal clothing (W-12)
- *Melt the Ice Cube* (W-13)
- Play "whose shadow" (SP-5)

## WOODWORKING

## MUSIC

- *I'm a Little Fox Squirrel* (F-20)
- *Three Little Snowflakes* (W-10)
- Dance like snowflakes (W-10)
- Sing "this is the way we shovel the snow" (W-11)
- Three rain drops song (SP-1)
- Raindances (SP-1)
- Rain sticks (SP-1)
- Rain recordings (SP-1)